THIRTY-SECOND ANNUAL REPORT

OF THE

Board of Trustees

OF THE

OHIO STATE UNIVERSITY

TO THE

Governor of Ohio

FOR THE

YEAR ENDING JUNE 30, 1902.

SPRINGFIELD, OHIO:
THE SPRINGFIELD PUBLISHING COMPANY,
STATE PRINTERS.

BOARD OF TRUSTEES.

1901-1902

*LUCIUS B. WING	Newark	May 13, 1902
THOMAS J. GODFREY	Celina	May 13, 1903
J. McLAIN SMITH	Dayton	May 13, 1904
PAUL JONES	Columbus	May 13, 1905
OSCAR T. CORSON	Columbus	May 13, 1906
DAVID M. MASSIE	Chillicothe	May 13, 1907
JOHN T. MACK	Sandusky	May 13, 1908
MYRON T. HERRICK	Cleveland	May 13, 1909

OFFICERS OF THE BOARD.

J. McLAIN SMITH	President.
OSCAR T. CORSON	Vice-President.
ALEXIS COPE	Secretary.
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PAUL JONES	JOHN T. MACK	MYRON T. HERRICK
J. McLAIN SMITH	O. T. CORSON	

FACULTY AND COURSES OF STUDY.

JOHN T. MACK THOS. J. GODFREY OSCAR T. CORSON

*Died February 1, 1902.

MEMBERS OF THE FACULTY AND OTHER INSTRUCTORS

1901-1902

WILLIAM OXLEY THOMPSON,
President—University Grounds.

WILLIAM HENRY SCOTT,
Professor of Philosophy—131 Fifteenth avenue.

SIDNEY AUGUSTUS NORTON,
Emeritus Professor and Lecturer in General Chemistry—363 East Town street.

STILLMAN W. ROBINSON,
Emeritus Professor of Mechanical Engineering—1353 Highland street.

NATHANIEL WRIGHT LORD,
Professor of Mineralogy and Metallurgy, Director of the School of Mines, and Dean of the College of Engineering—338 West Eighth avenue.

SAMUEL CARROLL DERBY,
Professor of Latin—93 Fifteenth avenue.

WILLIAM RANE LAZENBY,
Professor of Horticulture and Forestry—348 West Eighth avenue.

JOSIAH RENICK SMITH,
Professor of the Greek Language and Literature—950 Madison avenue.

HENRY ADAM WEBER,
Professor of Agricultural Chemistry—1342 Forsythe avenue.

BENJAMIN FRANKLIN THOMAS,
Professor of Physics and State Sealer of Weights and Measures—University Grounds.

GEORGE WELLS KNIGHT,
Professor of American History and Political Science, and of Constitutional Law—169 West Eleventh avenue.

ROSSER DANIEL BOHANNAN,
Professor of Mathematics—Sixteenth and Indianola avenues.

(1) C. NEWTON BROWN,
Professor of Civil Engineering—1343 Forsythe avenue.

ERNST AUGUST EGGERS,
Professor of Germanic Languages and Literatures—University Grounds.

ALBERT MARTIN BLEILE,
Professor of Anatomy and Physiology—218 King avenue.

WILLIAM ASHBROOK KELLERMAN,
Professor of Botany—175 Eleventh avenue.

THOMAS FORSYTHE HUNT,
Professor of Agriculture, and Dean of the College of Agriculture and Domestic Science—188 West Tenth avenue.

GEORGE BEECHER KAUFFMAN,
Professor of Pharmacy, and Dean of the College of Pharmacy—University Grounds.

BENJAMIN LESTER BOWEN,
Professor of Romance Languages and Literatures—46 Jefferson avenue.

JOSEPH VILLIERS DENNEY,
Professor of Rhetoric and the English Language, and Secretary of the University Faculty—230 West Tenth avenue.

ALLEN CAMPBELL BARROWS,
Professor of English Literature and Dean of the College of Arts, Philosophy and Science—85 West Tenth avenue.

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(1) Died March 6, 1902.

EDWARD ORTON, JR.,
Professor and Director of the Department of Clay Working and Ceramics—The Normandie.

WILLIAM FOREST HUNTER,
Dean of the College of Law and Professor of Law—1302 Bryden Road; 18 Board of Trade.

JAMES HENRY COLLINS,
Professor of Law—57 Lexington avenue; Ruggery Building.

EMILIUS OVIATT RANDALL,
Professor of Law—1025 Oak street; Supreme Court Room.

WILLIAM THOMAS MAGRUDER,
Professor of Mechanical Engineering—191 King avenue.

EDGAR BENTON KINKEAD,
Professor of Law—Wyandotte avenue; New Hayden Building.

WILLIAM HERBERT PAGE,
Professor of Law—527 East Broad street; 27 Board of Trade.

WM. McPHERSON, JR.,
Professor of Chemistry—University Grounds.

JOSEPH NELSON BRADFORD,
Professor of Drawing—54 West Tenth avenue.

DAVID STUART WHITE,
Professor of Veterinary Medicine, and Dean of the College of Veterinary Medicine—West Fifth avenue.

HERBERT OSBORN,
Professor of Zoology and Entomology—485 King avenue.

CHRISTOPHER P. LINHART,
Professor of Physical Education, and Director of the Gymnasium—The Vendome.

OLIVE BRANCHE JONES,
Librarian—53 Eleventh avenue.

HENRY CURWEN LORD,
Professor of Astronomy and Director of the Emerson McMillin Observatory—Observatory Park.

FRANK EDWIN SANBORN,
Professor and Director of the Department of Industrial Arts—303 West Eighth avenue.

FRANK ARNOLD RAY,
Professor of Mine Engineering—137 King avenue.

FREDERICK CONVERSE CLARK,
Professor of Economics and Sociology—1634 Neil avenue.

(1) WILLIAM DAVID GIBBS,
Professor of Agronomy—294 West Tenth avenue.

JOHN A. SHAUCK,
Professor of Law—95 Winner avenue.

CAPTAIN GEO. L. CONVERSE, U. S. A. (RETIRED),
Professor of Military Science and Tactics—94 Hoffman avenue.

PAUL FISCHER,
Professor of Pathological Anatomy—259 Marshall avenue.

JOHN WRIGHT DECKER,
Professor of Dairying—325 West Eighth avenue.

EMBURY ASBURY HITCHCOCK,
Professor of Experimental Engineering—380 West Eighth avenue.

FRANCIS CARY CALDWELL,
Professor of Electrical Engineering—401 West Sixth avenue.

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(1) Resigned January 1, 1902.

CHARLES SMITH PROSSER,
Professor of Geology—114 West Tenth avenue.

JOHN ADAMS BOWNOCKER,
Professor of Inorganic Geology and Curator of the Museum—1594 Neil avenue.

ALFRED DODGE COLE,
Professor of Physics—45 West Eleventh avenue.

(1) JAMES M. BUTLER,
Professor of Law—Board of Trade.

MINNIE A. N. STONER,
Professor of Domestic Science—46 West Tenth avenue.

WILBUR HENRY SIEBERT,
Associate Professor of History—1332 Highland street.

GEORGE WASHINGTON McCOARD,
Associate Professor of Mathematics—46 West Fourth avenue.

CHARLES WALTER MESLOH,
Associate Professor of German—University Grounds.

ARTHUR WINFRED HODGMAN,
Associate Professor of Classic Languages—164 West Ninth avenue.

CORNELIA PORTER SOUTHER,
Associate Professor of Domestic Art—1356 Neil avenue.

CLARA MAUD BERRYMAN,
Associate Professor of Physical Education—485 East Town street.

WILLIAM EDWARDS HENDERSON,
Associate Professor of Chemistry—41 West Eleventh avenue.

CHRISTOPHER ELIAS SHERMAN,
Associate Professor of Civil Engineering—772 Oak street.

JOSEPH RUSSELL TAYLOR,
Associate Professor of Rhetoric—corner King and Worthington.

JAMES ELLSWORTH BOYD,
Associate Professor of Mathematics—25 Maynard avenue.

CHARLES A. BRUCE,
Associate Professor of Romance Languages—234 West Tenth avenue.

SEPTIMUS SISSON,
Associate Professor of Veterinary Medicine—124 West Fourth avenue.

THOMAS EWING FRENCH,
Associate Professor of Drawing—1458 Worthington.

DAVID R. MAJOR,
Associate Professor of Education—307 West Sixth avenue.

J. WARREN SMITH,
Lecturer on Meteorology—55 Cleveland avenue.

WILLIAM LUCIUS GRAVES,
Assistant Professor of Rhetoric—1313 Forsythe avenue.

CLAIR ALBERT DYE,
Assistant Professor of Pharmacy—169 King avenue.

CHARLES WILLIAM FOULK,
Assistant Professor of General Chemistry—41 Eleventh avenue.

CHARLES LINCOLN ARNOLD,
Assistant Professor of Mathematics—328 West Eighth avenue.

JOHN H. SCHAFFNER,
Assistant Professor in Botany—40 West Tenth avenue.

(1) Resigned February 7, 1902.

CHARLES BRADFIELD MORREY,
Assistant Professor of Anatomy and Physiology—86 King avenue.

JAMES STEWART HINE,
Assistant Professor of Entomology—26 West Fourth avenue.

KARL DALE SWARTZEL,
Assistant Professor of Mathematics—57 West Eighth avenue.

GEORGE H. McKNIGHT,
Assistant Professor of Rhetoric and English Language—312 West Seventh avenue.

HERRICK CLEVELAND ALLEN,
Assistant Professor of Rhetoric and English Language—275 East Gay street.

FRANCIS LEROY LANDACRE,
Assistant Professor of Zoology and Entomology—1332 Highland street.

WALLACE S. ELDEN,
Assistant Professor of Classic Languages—1462 Neil avenue.

FRED A. FISH,
Assistant Professor of Electrical Engineering—229 West Eleventh avenue.

WILLIAM ABNER KNIGHT,
Assistant Professor of Machine Shop Practice—206 West Lane avenue.

HARRY WALDO KUHN,
Assistant Professor of Mathematics—234 West Tenth avenue.

JAMES E. HAGERTY,
Assistant Professor of Economics and Sociology—212 West Tenth avenue.

THEODORE C. SMITH,
Assistant Professor of American History and Political Science—179 West Eleventh avenue.

J. D. BACHELDER,
Assistant Professor of Romance Languages—Hotel Vendome.

FREDERICK E. KESTER,
Assistant Professor of Physics—1473 Neil avenue.

THOMAS HARVEY HAINES,
Assistant Professor of Philosophy—368 King avenue.

BURT BIDWELL HERRICK,
Instructor in Cheese-making—167 Tenth avenue.

WILLIAM HENRY RENCK,
Instructor in Pattern Making and Founding—910 West Rich street.

CHARLES PHILIP CROWE,
Instructor in Forging—971 Highland street.

ALONZO HUBERT TUTTLE,
Instructor in American History—215 West Tenth avenue.

ARTHUR ERNEST DAVIES,
Instructor in Philosophy—Seventeenth avenue.

ALBERT EARL VINSON,
Instructor in Agricultural Chemistry—134 West Ninth.

THOMAS KENYON LEWIS,
Instructor in Drawing—1293 Dennison avenue.

SILAS MARTIN,
Instructor in Drawing—1269 Dennison avenue.

JOSEPH H. VOESKUEHLER,
Instructor in Drawing—54 West Tenth avenue.

ALBERT V. BLEININGER,
Instructor in Ceramics—312 West Seventh avenue.

BERTHOLD A. EISENLOHR,
Instructor in Germanic Languages—388 West Eighth avenue.

SAMUEL E. RASOR,
Instructor in Mathematics—1594 Neil avenue.

EDWARD E. SOMERMEIER,
Instructor in Metallurgy and Mineralogy—1590 Neil avenue.

DON CARLOS HUDDLESON,
Instructor in Physical Education—292 Fifteenth avenue.

MERRITT F. MILLER,
Instructor in Agronomy—252 West Eighth avenue.

FRANK RUHLEN,
Instructor in Zootechny—University Grounds.

ALBERT F. HALL,
Machinist in Mechanical Engineering—1051 Highland street.

HARRIET TOWNSHEND,
Assistant Librarian—53 West Eleventh avenue.

MAUDE DOROTHY JEFFREY,
Assistant in Library—65 West Eleventh avenue.

GERTRUDE STOWELL KELLICOTT,
Assistant in Library—1332 Highland street.

CLAUDE B. GUITTARD,
Assistant in Library—80 McMillen avenue.

OLIVER V. BRUMLEY,
Assistant in Veterinary Medicine—University Grounds.

DELBERT ALONZO CROWNER,
Assistant in Butter Making—North Dormitory.

MELVIN DRESBACH,
Assistant in Anatomy and Physiology—236 West Eighth avenue.

FRED J. TYLER,
Assistant in Botany—43 East Ninth avenue.

WILLIAM L. DAVIES,
Assistant in Civil Engineering—47 West Eighth avenue.

VERNON H. DAVIS,
Assistant in Horticulture and Forestry—O. S. U. Campus.

F. A. BOHN,
Assistant Reference Librarian—71 West Eleventh avenue.

GEORGE W. FROST,
Assistant in Mechanical Engineering—241 Buttles avenue.

RUDOLPH HIRSCH,
Assistant in Agricultural Chemistry—1000 South Front street.

SARAH BARROWS,
Assistant in Germanic Languages—85 West Tenth avenue.

FRANK E. HAMILTON,
Assistant in Agriculture—University Grounds.

WILLIAM C. MILLS,
Curator of Archæology—19 West Tenth avenue.

C. P. LINVILLE,
Fellow in Chemistry—61 West Eighth avenue.

W. L. DUBOIS,
Fellow in Chemistry—61 West Eighth avenue.

J. F. TRAVIS,
Fellow in Mathematics—1018 Neil avenue.

JOHN C. BRIDWELL,
Fellow in Botany—43 East Ninth avenue.

ELMA B. PERRY,
Fellow in Botany—46 West Tenth avenue.

GRACE LENORE PITTS,
Fellow in Economics—309 East Gay street.

(1) RODGER DENISON DEWOLF,
Fellow in Electrical Engineering—202 West Eighth avenue.

(1) CHARLES B. SAYRE,
Fellow in Library—716 Neil avenue.

MELVILLE T. COOK,
Fellow in Zoology and Entomology—4 West Seventh avenue.

HARRY THOMAS HANCE,
Fellow in Chemistry—1093 East Long street.

(1) DANFORTH E. BALL,
Fellow in Astronomy—565 East Broad street.

C. S. VAN DYKE,
Fellow in Industrial Arts—202 West Eighth avenue.

CLARA CONVERSE EWALT,
Fellow in Rhetoric and English Language—70 Buttles avenue.

FRANK C. McKINNEY,
Fellow in Rhetoric and English Language—185 West Ninth avenue.

ANNA E. WILLIAMS,
Fellow in Rhetoric and English Language—35 King avenue.

C. G. CONLEY,
Fellow in Astronomy—233 West Eleventh avenue.

(1) JOHN R. CHAMBERLAIN,
Fellow in Architecture and Drawing—103 West Ninth avenue.

CARL CONRAD ECKHARDT,
Fellow in Library—71 West Eleventh avenue.

A. D. SPROAT,
Student Assistant in Metallurgy and Mine Engineering—Neil avenue.

OTTO E. JENNINGS,
Florist—University Grounds.

(1) Resigned.

EXECUTIVE DEPARTMENT

1901-1902

WILLIAM O. THOMPSON ..... President
ALEXIS COPE ..... Secretary Board of Trustees and Bursar
KATHERINE H. DUNCAN ..... Executive Clerk
EDITH D. COCKINS ..... Registrar
CARL E. STEEB ..... Accountant
EDITH R. HUBLER ..... Secretary's Clerk and Stenographer
HELEN R. POWELL ..... Assistant Registrar

CHIEF ENGINEER
WILLIAM C. MCCRACKEN.

STATE GEOLOGIST
PROFESSOR EDWARD ORTON, JR.

STATE SEALER OF WEIGHTS AND MEASURES
THE PROFESSOR OF PHYSICS, *Ex-Officio.*

COLUMBUS, O., Nov. 1, 1902.

His Excellency, HON. GEO. K. NASH, *Governor of Ohio*:

DEAR SIR: I have the honor to transmit herewith the thirty-second annual report of the Board of Trustees, Ohio State University.

Very respectfully,

Your obedient servant,

ALEXIS COPE, *Secretary.*

REPORT OF THE BOARD OF TRUSTEES.

OFFICE OF THE BOARD OF TRUSTEES,

OHIO STATE UNIVERSITY,
COLUMBUS, Ohio, June 30, 1902.

HON. GEORGE K. NASH, *Governor of Ohio*:

SIR:—In compliance with law, the board of trustees respectfully submits the thirty-second annual report of the Ohio State University, it being for the year ending June 30, 1902.

ENDOWMENTS.

The part of the irreducible debt of the state which forms the endowment of the university at the date of the last annual report, June 30, 1901, was $558,031.79, on which the annual interest was $33,481.90.

Under the operations of the act of the general assembly of March 14, 1899, entitled, "An act to quiet title to unpatented lands in the Virginia Military District of Ohio," the following sums were added thereto: July 1, 1901, $152.50; July 15, 1901, $759.38; August 10, 1901, $6.80; August 21, 1901, $65.24; August 27, 1901, $68.00; November 25, 1901, $42.65; December 2, 1901, $93.25; December 14, 1901, $216.50; December 20, 1901, $270.46; February 1, 1902, $94.00; February 10, 1902, $97.02; February 14 1902, $165.89; February 17, 1902, $210.00; February 24, 1902, $200.00; March 19, 1902, $283.75; April 7, 1902, $256.75; April 8, 1902, $102.00;; April 14, 1902, $361.31; April 22, 1902, $194.12; May 12, 1902, $218.33; May 27, 1902, $100.00; June 7, 1902, $500.00; June 10, 1902, $110.20. Total additions during the year, $4,668.15, making the endowment fund June 30, 1902, $562,669.24, upon which the annual interest is $33,761.99.

THE WILLIAM JENNINGS BRYAN PRIZE.

The principal of the sum of $250, which was donated to the university by the Hon. William Jennings Bryan in 1898 on condition that the annual interest thereon was to be awarded as a prize for the best essay discussing the principles which underlie our form of government, and which was added to the irreducible debt of the state under the provisions of section

4105-15 of the revised statutes of Ohio, on June 30, 1901, $290.97, on which the annual interest was $17.46.

There having been no award of such prize during the year just closed, the principal of said sum, under the operation of the law cited, on June 30, 1902, is $308.69, on which the annual interest is $18.52.

RECEIPTS AND DISBURSEMENTS.

The receipts and disbursements for the year ending June 30, 1902, having been as follows:

RECEIPTS.

Balance in treasury June 30, 1901	$ 11,306 99	
Interest on endowment	33,606 01	
State levy	193,385 25	
State building levy	64,997 05	
Sale of refunding bonds	43,433 00	
Appropriation act of congress 1890	25,000 00	
Rents	2,649 70	
Virginia military lands	40 00	
Students' fees	37,505 00	
Sale store-room cards, etc	4,710 89	
Sale store-room supplies	264 31	
N. B. M. A. scholarship	250 00	
Diploma fees	760 00	
Veterinary clinic	847 73	
Siebert library	200 00	
Outhwaite collection	125 00	
Fees lake laboratory	205 00	
Summer shop work	460 00	
Miscellaneous receipts	260 47	
		$420,006 40

DISBURSEMENTS.

Bonds and interest	$ 78,762 50	
Salaries instruction	157,604 29	
Salaries administration	30,081 16	
Expenses of trustees	352 12	
Repairs buildings	7,703 90	
Repairs, heat, light and power plant	3,869 79	
Fuel	8,356 71	
Gas	1,940 62	
Water	1,847 24	
Improvement and care roads and grounds	3,660 91	
Advertising	1,109 53	
Printing, bulletins, blanks, etc	904 30	
Blank books and stationery	154 70	
Postage	595 80	
Furniture, cases and shelving	994 20	
Rent fire alarm and signal boxes	316 00	
Telephone service	473 60	
Telegrams	28 94	
Messenger and guide service	383 32	
Oils	340 60	
General supplies, cleaning materials, etc	1,047 84	
Freight and cartage	485 05	
Commencement expenses	767 24	
Expenses committees visiting other institutions	449 45	

Insurance	198 99	
Extra watchman service	57 50	
Extra clerks and stenographers	159 10	
Extra janitors	45 23	
Instruments and apparatus	12,828 00	
Library of Professor Brown	326 65	
Laboratory supplies	16,187 24	
Student labor in departments	2,781 04	
Law building	50,027 12	
Additions to power plant	12,706 06	
Library	5,932 88	
N. B. M. A. scholarship	15 98	
Bleachers, athletic field	1,000 00	
Additional fire protection	597 62	
Virginia military lands	190 30	
Veterinary clinic	462 33	
Miscellaneous	429 84	
		$406,175 69
Balance June 30, 1902		13,830 71

The treasurer's report, filed herewith, shows each item in detail of such receipts and expenditures.

VIRGINIA MILITARY LANDS.

On June 30, 1901, the total receipts from sales of Virginia military lands granted to the university by act of the general assembly of March 26, 1872, were	$65,525 28	
The receipts from this source for the year ending June 30, 1902, were	40 00	
		$65,565 28
The expenses incident to the survey and disposition of said lands to June 30, 1901, were	29,058 55	
Such expenses for the year ending June 30, 1902, were	190 30	
		29,248 85
Leaving net cash receipts to June 30, 1902		36,316 43
Of this sum there has been paid into the state treasury to the credit of the endowment fund	13,665 14	
And expended for building and maintaining residences for the professors, under act if April 17, 1882, the sum of	22,637 57	
		36,302 71
Leaving balance June 30, 1902		$ 13 72

The receipts and disbursements of this fund are included in the general account of the aggregate receipts and disbursements.

ADDITIONS TO ENDOWMENT.

For the period ending June 30, 1901, the additions to the endowment under the operations of an act of the general assembly, passed March 14, 1889, entitled, "An act to quiet title to unpatented lands in the Virginia Military District of Ohio," an act passed April 21, 1893, entitled, "An act for the relief of certain persons who formerly held lands in the Virginia Military District of Ohio," an act amendatory of said last mentioned act, passed April 21, 1894; an act passed April 28, 1898, entitled, "An act making appropriations for the relief of certain persons

who formerly held lands in the Virginia Military District of Ohio;" an act passed April 10, 1900, entitled, "An act making appropriations for the relief of certain persons who formerly held lands in the Virginia Military District of Ohio," were $20,190.35.

During the year ending June 30, 1902, under the operations of said first-mentioned act, there was added to said endowment the sum of $4,668.15, making the total additions to the endowment under these acts $24,858.50.

NEW MORRILL FUND.

The following are the receipts and disbursements for the year ending June 30, 1902, of the appropriations made by act of congress of August 30, 1890, and known as the "New Morrill Fund."

RECEIPTS.

Balance in treasury June 30, 1901	$ 362 12	
Appropriations for year ending June 30, 1902	25,000 00	
		$25,362 12

DISBURSEMENTS.

For instruction and facilities in agriculture	$ 4,831 66	
For instruction and facilities in mechanical arts	6,103 32	
For instruction and facilities in English language	2,080 00	
For instruction and facilities in mathematical science	2,755 00	
For instruction and facilities in physical science	8,190 00	
For instruction and facilities in economic science	1,28000	
		25,239 98
Balance in treasury June 30, 1902		$ 122 14

Said receipts and disbursements are included in the preceding statement of the aggregate receipts and disbursements.

The act of congress making this appropriation, requires a detailed annual statement of the receipts and expenditures of this fund, showing specifically the purposes to which it has been applied, which report, for the year ending June 30, 1902, is appended to the report of the treasurer filed herewith.

BONDED INDEBTEDNESS.

The bonded indebtedness of the university June 30, 1901, was $305,000, due and payable as follows: $55,000, December 1, 1901, $10,000, June 1, 1902; $55,000, December 1, 1902; $10,000, June 1, 1903; $55,000, December 1, 1903; $10,000, June 1, 1904; $15,000, December 1, 1904; $10.000, June 1, 1905. $15,000, December 1, 1905; $25,000, December 1, 1906; $25,000, December 1, 1907; $20,000, December 1, 1908.

Of this indebtedness, $40,000 bore interest at 6 per cent. and $265,000 at 4½ per cent. per annum, payable semi-annually.

The sum of $25,000 of said indebtedness falling due December 1, 1901, was paid when due and the bonds were taken up and canceled.

Under and pursuant to the provisions of an act of the general assembly, entitled, "An act to authorize the board of trustees of the Ohio State University to refund and extend the time of payment of portions of the bonded indebtedness of said institution as the same becomes due," passed April 23, 1898, $30,000 of the 4½ per cent. certificates of indebtedness falling due December 1, 1901, were taken up by an issue of the same amount of 4½ per cent. refunding bonds falling due, $5,000 December 1, 1908, and $25,000 December 1, 1909. Said bonds brought a premium of $2,550.

Under the provisions of the same act, the $10,000 6 per cent. certificates of indebtedness falling due June 1, 1902, were also taken up by an issue of the same amount of 4½ per cent. refunding bonds, falling due December 1, 1910. Said issue of refunding bonds brought a premium of $883. The premiums received in these transactions reduce the interest on the bonds so refunded to about 3 per cent.

Said reductions of principal and interest left the bonded indebtedness June 30, 1902, $280,000, of which $30,000 bears interest at 6 per cent. and $250,000 at 4½ per cent. per annum, payable semi-annually.

Said remaining indebtedness falls due as follows: $55,000, December 1, 1902; $10,000, June 1, 1903; $55,000, December 1, 1903; $10,000, June 1, 1904; $15,000, December 1, 1904; $10,000, June 1, 1905; $15,000, December 1, 1905; $25,000, December 1, 1906; $25,000, December 1, 1907; $25,000, December 1, 1908; $25,000, December 1, 1909; $10,000, December 1, 1910.

THE LAW BUILDING.

In the last annual report, report was made of the approval of plans for a law building and the awarding of the contract for its erection for the sum of $73,000. In such report the hope was expressed that it would be ready for occupancy by September, 1902.

The progress of the work on such building has been slow. In putting in the foundation it was found that the ground underneath was of such a character that additional footings had to be provided. Supplemental plans for the same were prepared, and approved by the governor, auditor of state and secretary of state, and a contract therefor was made with the original contractor for said building, and was approved by the attorney general. The cost of such additional footings was $4,272.20.

There has been delay in getting iron and other material, but we still hope that a portion of the building, at least, will be ready for occupancy by the time the work of the next academic year begins.

The building has been named "Page Hall," in memory of Hon. Henry F. Page, who devised his large landed estate to the university.

ADDITIONS TO HEAT, LIGHT AND POWER PLANT.

The additions to the heat, light and power plant, mentioned in the last annual report, have been practically completed in a satisfactory manner, except that there is a marked defect in the generator furnished by the Westinghouse Electric and Manufacturing Company, which, however, said company has undertaken to remedy by making and installing another of the same type. When this is done said plant will be adequate for the present needs of the institution, but will not be adequate when all the proposed buildings are completed.

PROVISIONS FOR ADDITIONAL BUILDINGS.

At a meeting of the board of trustees in January of the present year the needs of the university in the way of additional buildings was considered and discussed. It was found at that time that the building levy provided by the act of March 29, 1900, would not yield a sufficient sum to finish the law building, provide for the necessary additions to the heat, light and power plant and leave a sum sufficient to erect a building for the department of physics adequate for the needs of such department, and that there was pressing need for additional accommodations in the way of additions to present buildings, or new buildings, for a number of the departments. After a careful consideration of such various needs it was decided to ask the legislature, then in session, for the addition to the state levy of one-tenth of a mill for the years 1903 and 1904, to be used for completing the erection and equipment of a building for the department of physics, the establishment and maintenance of a teachers' college and the erection, improvement and equipment of such other buildings as in the judgment of the board of trustees might be thought necessary, and also to ask for authority to anticipate such levies. Bills embodying these provisions were introduced, and after prolonged consideration by the finance committees, bills were passed fixing the levy for the next two years at 15-100ths of a mill and authorizing the issue of two hundred thousand dollars of bonds in anticipation of such levies.

At the meeting of the board of trustees held May 16, 1902, shortly after this action of the legislature, President Thompson was requested to take up the matter of additions to buildings, new buildings and new equipments, and report thereon at the next meeting of the board. On June 13, 1902, the president made his report to the board of trustees, and after due consideration it was ordered that the plans for a building for the department of physics be revised so as to povide for a building to cost when completed not to exceed $120,000, that part to be erected at present to cost not to exceed $80,000; that plans be prepared for an engineering building, to cost when completed not to exceed $120,000, that portion to

be built immediately to cost not to exceed $80,000; a veterinary building, to cost not to exceed $25,000, and an addition to the chemical building, to cost not to exceed $20,000. Said plans to be completed not later than August 4, 1902.

The following improvements were also authorized to be made from funds provided by action of the legislature above referred to. Change of steam pipes in armory at a cost of $1,500; additional apparatus for purifying the water used in boilers, estimated cost, $2,500; and a building for the lake laboratory at Sandusky, cost $2,500.

It is hoped that all the foregoing improvements may be completed within the next two years.

THE CAMPUS.

For the first time in the history of the university it seemed possible to begin a long-contemplated improvement, to-wit, the opening, grading and macadamizing of a proper driveway from High street. The work was begun in the fall of 1901, and finished to a point near the law building, with the intention of extending it to connect with driveway in front of Orton hall when the law building should be completed. There was expended on the campus during the year the sum of $3,660.91. In this sum is included the cost of the above-mentioned improvement, the expense of grading about the president's house and for the usual care of the lawns, walks and drives.

LIBRARY.

The expenditures for the library for the year ending June 30, 1902, exclusive of the salaries of the librarian and regular assistants, were $5,932.88. Of this sum there was paid for furniture, cases and shelving, $111.25; for printing, stationery and current supplies, $173.94; for printing, $625; for student assistance, $364.49; for books and periodicals, $4,647.70.

The number of books in the library on June 30, 1901, was 40,580; the librarian's report shows that there were 3,943 books added during the year, making the total number June 30, 1902, 44,523. Of those added during the year, 1,595 were received by purchase, 2,122 by gift and 226 by way of exchange.

The librarian, in her annual report, calls special attention to the continuation of the gifts of books to be added to the Siebert collection of works on German history and to the Outhwaite collection of works on the civil war. For these gifts the trustees desire to express their acknowledgment.

The librarian also alludes to the fact that the university has been given the benefit of the Smithsonian system of foreign exchange, and reports that so far fifty learned societies and institutions have responded

favorably where our reports have been sent to them, and that with these societies there have been instituted arrangements for permanent exchange of publications.

In former reports much has been said of efforts looking towards acquiring a complete set of the congressional documents. The librarian reports that the set at the university library lacks now only 209 numbers to make it complete, and gives the numbers of the missing volumes.

She also reports that through the interest of Mr. N. D. C. Hodges, Librarian of the public library of Cincinnati, and the active efforts of Hon. Jacob H. Bromwell, of Cincinnati, the Ohio State University has been designated as a permanent depository for all United States publications. The trustees, appreciating the value of this service, have placed on record a resolution thanking these gentlemen for the interest they have taken in the university library.

PAGE WILL CASE.

In preceding annual reports mention has been made of the will of the late Hon. Henry F. Page, of Circleville, in which he devised certain farming lands in Ohio and Illinois (about 900 acres in Ohio and about 1,000 acres in Illinois, estimated to be worth $150,000) to the Ohio State University, subject to life estates therein to his widow, Mrs. Charlotte G. Page, and his only child, Isabel Page.

The will provided that in the event of the testator's death within a year, and the consequent failure of the devise to the university, the estate after the death of the widow and daughter should go to certain children of his two brothers. By a subsequent provision of the will, the testator requested his daughter Isabel to ratify and confirm the devise to the University, and provided in case she complied with such request that the devise to the said children of his brother should thereby be revoked.

Mr. Page died within a year after making the will, and his daughter formally ratified and confirmed the devise to the university, and by deed duly executed conveyed to it the lands so devised.

Isabel died shortly afterwards and suits were filed in both Ohio and Illinois to set aside the will and the deed of ratification and confirmation.

The suit in Ohio was carried to the supreme court and decided in favor of the university, the court holding, in substance, that the deed of Isabel Page, ratifying and confirming the devise to the university, whether valid or invalid, revoked the devise to the children of testator's brothers, and that they have no claim under the will.

After such decision, the widow of the testator, Mrs. Charlotte G. Page, executed a deed to the university, releasing to it any interest she might have in the lands devised to the university over and beyond the life

estate therein provided for her, which deed was duly recorded in the counties in which the lands lie.

Mrs. Page died shortly after the execution of said deed of release, and by the terms of the will, the title to the lands and the income thereof vested in the university.

Notwithstanding the decision of the supreme court above mentioned, the collateral kindred of Mr. Page still asserted a claim to the lands and a portion of the accumulated income, and the trustees under the will filed a suit in Pickaway county, setting up the conflicting claims of the parties in interest and asking the court's decision thereon, and one of the claimants, a resident of the state of Michigan, filed a suit in the United States circuit court, raising the same questions.

During the pendency of the before-mentioned suits, Mr. John G. Haas, one of the trustees under the will, was appointed receiver, and has been managing the lands, collecting the rents, investing the proceeds and holding them until the determination of such suits.

Early in the present year the suit pending in the Illinois court was decided in favor of the university. The defeated parties gave notice of appeal, but failed to perfect such appeal within the time prescribed by law. Thereupon the board of Trustees of the university made formal demand of Mr. John G. Haas, trustee and receiver, that he at once surrender to them possession of the Illinois lands and pay over the rents and profits which he had received therefrom since the death of Mrs. Charlotte G. Page. On May 27, 1902, Mr. Haas formally surrendered possession of the Illinois lands and agreed to pay over to the university the accumulated rents and profits, amounting to about $12,000, as soon as he could convert the same into cash. As the defeated parties can at any time within five year begin proceedings in error to reverse the decision of the court deciding the case, Mr. Haas was employed by the trustees of the university to manage the lands for them, collect the rents and pay over the proceeds until the final adjudication of the case.

The case pending in the United States circuit court involving the Ohio lands was recently decided in favor of the university, but has been appealed to the United States court of appeals. The case will probably be disposed of by that court next fall. There are good reasons for believing that all questions involved in these cases will be decided in favor of the university.

By the terms of the will the lands are to be sold and the proceeds made a part of the endowment fund of the university. The lands have increased in value and are now probably worth $175,000.

GIFTS DURING THE YEAR.

A number of important gifts were made during the year, the larger number being books for the library and additions to the collections in the various museums and laboratories.

At the commencement in June, 1902, Mr. Stillman W. Robinson, emeritus professor of mechanical engineering, again showed his generous interest in the university by offering to permantly endow a scholarship in the college of engineering in the sum of $5,000. It is needless to say that the offer was promptly accepted. He is taking time to specify the details of its administration, including the method of its award and the qualifications of those to whom it shall be awarded. When these are specified the money will be paid over.

Under the law, all moneys received by gift, unless otherwise specified by the donor, are required to be paid into the state treasury, and become a part of the irreducible debt of the state, on which the state pays interest at 6 per cent. semi-annually. This insures absolute security for the fund and a never-failing income.

This is the first permanent endowment of a scholarship which the university has received. It is to be hoped that others will follow Professor Robinson's generous example, and that the result will be a number of scholarships and fellowships to be awarded to the worthy youth of the state who show the qualities which deserve such aid.

The librarian reports gifts in money and books from the Hon. Joseph H. Outhwaite for the collection of works on the civil war which has been named for him, and which he proposes to add to from year to year.

Also gifts of money from Mr. John Siebert and Mr. Louis Siebert, of Columbus, for the purchase of books for the Siebert collection of works of German history. These gifts during the year amounted to the sum of $200.

Mr. F. L. Packard, architect, of Columbus, Ohio, manifested his attachment for and his continued interst in the university, where he was a student, by donating to the department of architecture and drawing a plaster model of a proposed enlargement of the state house, and other architectural models, of the value of over $500, for which the trustees with to make special acsknowledgments.

The gifts to the various collections before mentioned are as follows:

AGRICULTURE.

GIFTS.

	Value.
Syracuse Chilled Plow Co., Syracuse, N. Y., 1 sulky breaking plow.....	$ 40 00
Syracuse Chilled Plow Co., Syracuse, N. Y., 1 walking breaking plow....	17 00
McCormick Harvester Co., Chicago, Ill., 1 lot samples binder twine.....	2 00
Judge J. M. Van Meter, Chillicothe, O., 1 bushel seed corn.....	2 00

	Value.
A. P. Crout, Winchester, Ill., 1 bushel Boone county white seed corn....	2 00
C. B. Lipscomb, Afton, Va., ½ bushel Virginia ensilage white seed corn..	1 00
Sure Hatch Incubator Co., Columbus, O., 100 egg Sure Hatch incubator...	20 00
Orr & Douglas, Boston, Mass., samples of butter and cheese cultures....	2 00

LOANS.

McCormick Harvester Co., Chicago, Ill., 2 binders.....
McCormick Harvester Co., Chicago, Ill., 1 mower.....
Deering Harvester Co., Chicago, Ill., 1 Deering binder.....
Deering Harvester Co., Chicago, Ill., 1 Deering mower.....
Milwaukee Harvester Co., Milwaukee, Wis., 1 Milwaukee binder.....
Milwaukee Harvester Co., Milwaukee, Wis., 1 Milwaukee mower.....
Warder, Bushnell & Glessner Co., Springfield, O., 1 Champion binder....
Warder, Bushnell & Glessner Co., Springfield, O., 1 Champion mower....
Osborn Harvesting Machine Co., Auburn, N. Y., 1 Osborn binder, 1 Osborn mower, 1 Osborn hay tedder .....
Bucher & Gibbs, Canton, O., 1 sulky breaking plow, 1 walking breaking plow, 1 one-horse cultivator, 1 spring tooth harrow.....
F. B. Fargo & Co., Lake Mills, Wis., 1 Victor combined churn and butter worker .....
D. H. Burrell & Co., Little Falls, N. Y., 1 simplex combined churn and butter worker .....
DeLaval Separator Co., New York City, 6 centrifugal cream separators..
National Dairy Machine Co., Newark, N. J., 1 National centrifugal cream separator .....
United States Butter Extractor Co., Bloomfield, N. J., 1 Empire centrifugal cream separator .....
Vermont Farm Machine Co., Bellows Falls, Vt., 4 U. S. centrifugal cream separators .....
A. H. Reid, Philadelphia, Pa., 1 centrifugal cream separator and a milk pasteurizer .....
P. M. Sharples, West Chester, Pa., 3 centrifugal separators.....
F. M. Wilson, Selma, O., 1 milk pasteurizer.....

AGRICULTURAL CHEMISTRY.

Lenk Wine Co., Sandusky, O., sample of argol.....	1 00

ARCHITECTURE AND DRAWING.

F. L. Packard, Columbus, O., 1 plaster model of proposed Ohio state capitol building, 2 plaster models of Orton Hall entrance.....	500 00
Bryant Bros., Columbus, O., 12 plaster ornaments for interior decoration.	25 00
New York Life Insurance Co., New York, 1 colored perspective of their home office	20 00
New York Life Insurance Co., New York, 5 architectural photographs...	15 00
Prudential Life Insurance Co., 1 colored perspective of their home office.	20 00

CHEMISTRY.

German Kali Works, New York, set of potash specimens from Stassfurt Mines	25 00
Chilean Nitrate Co., set of specimens.....	5 00

CIVIL ENGINEERING.

Three full-sized models of rail joints from the rail joint mfg. companies.	15 00

DOMESTIC SCIENCE.

	Value.
Walter H. Baker & Co., cabinet of chocolate products	5 00
From various manufacturing firms, table cutters, meat cutters, etc.	2 50

ELECTRICAL ENGINEERING.

Lincoln Electric Co., Cleveland, O., 1 plating dynamo, for historical collection	25 00
New York & Ohio Co., Warren, O., 85 lbs. cut transformer iron	8 50
The D. & W. Co., Providence, R. I., 1 lot of inclosed fuses	15 00
Converse Transformer Co., Pittsburg, Pa., 50 lbs. transformer iron	5 00
Okonite Co., 253 Broadway, N. Y., 1 doz. wire computers	12 00
National Underwriters' Bureau, 65 copies National Code	3 25
Goldmark & Wallace, 67 Cortland street, N. Y., 4 dynamo brushes	2 00
The Ohio Brass Co., Mansfield, O., samples of railway bonds	75
Harrold P. Brown, 120 Liberty street, N. Y:, samples of railway bonds.	5 00
The Protected Rail Bond Co., Philadelphia, Pa., samples of railway bonds.	2 00
A. & J. M. Anderson Mfg. Co., Boston, Mass., samples of railway bonds.	1 00
S. H. Harrington, 143 Liberty street, N. Y., samples of railway bonds	50
The General Electric Co., Schenectady, N. Y., samples of railway bonds.	4 00

HORTICULTURE AND FORESTRY.

Mrs. Alexander Houston, Columbus, O., collection of 89 specimens of native and foreign woods, value indeterminate, and a mounted and framed specimen of the edelweiss

Nelson Cox, Engels, O., specimens of Rome Beauty apples

E. J. Riggs, Raccoon Island, O., specimens of seedling apples

INDUSTRIAL ARTS.

Kempsmith Manufacturing Co., Milwaukee, Wis., set of blue prints of Universal milling machinery

MECHANICAL ENGINEERING.

American Manufacturing Co., New York, collection of Manila sisal fibres and ropes and copy of their book on rope transmission

American Steel & Wire Co., Chicago, Ill., framed collection of cards of nails and other materials manufactured by them

Arguto Oilless Bearing Co., Philadelphia, Pa., sample of their bushings and pulleys

John H. Armitage Co., Philadelphia, Pa., sample of pulley covering for belt testing machine

Babcock & Wilcox Co., New York, hydraulically pressed forging of steel header and steel saddle for shell water tube boiler

Baush Machine Tool Co., Springfield, Mass., sample of Bocorselski universal joint

Benedict & Burnham Manufacturing Co., Waterbury, Conn., sample of nickel tube for surface condensers

Mr. William Whitcomb, of the Alston Foundry Co., Boston, Mass., a wood split chase pulley fitted with cork inserts

Eastwood Wire Manufacturing Co., Belleville, N. J., 1 brass valve

Gray & Prior Co., Hartford, Conn., double joint sample of the universal joint

A. A. Griffin Iron Co., Jersey City, N. J., sectional model of A. Bundy

Value.

steam trap .....
The Holman Dash Maurer Manufacturing Co., Rochester, N. Y., special flue gas thermometer, graduated to 1,000 degrees Fah.....
L. Batzenstein & Co., New York, 7 sets of metallic packing for new experiment engine .....
Otto Konigslow Co., Cleveland, O., sample of ball-bearing race.....
W. G. Johnson, a whole-pressure gauge patented in 1885.....
The Larkin Mtallic Packing Co., Pittsburg, Pa., 8 sets of metallic packing for Worthington pump .....
James McKinney & Son, Albany, N. Y., sample of punched cast iron plate.
Pittsburg Gage and Supply Co., Pittsburg, Pa., sectional safety water column with alarm .....
Robert Shaw Oliver, General Superintendent Rathbone, Sard & Co., Albany, N. Y., eliminator .....
James L. Robertson & Sons, New York City, 1 Hine eliminator.....
Rockwood Manufacturing Co., Indianapolis, Ind., a paper pulley for belt testing machinery .....
Vanderbeek Tool Works, Hartford, Conn., 2 universal joints.....
Vincent Valve Co., Sandusky, O., 1 sectional valve.....
Milton F. Williams & Co., St. Louis, Mo., a pneumatic pulley and belt testing machine .....
The Arnold Electric Power Station Co., Chicago, Ill., drawings and photographs .....
Buffalo Forge Co., Buffalo, N. Y., drawings and photographs.....
Pittsburg Gage and Supply Co., Pittsburg, Pa., drawings and photographs .....
Frank H. Bull, General Manager American Engine Co., Bound Brook, N. J.; Richmond Works of the American Locomotive Co., Richmond, Va.; Baldwin Locomotive Works, Philadelphia, Pa.; The C. W. Hunt Co., West New Brighton, N. Y.; The Lodge & Shipley Machine Tool Co., Cincinnati, O.; The Northern Electric Manufacturing Co., Madison, Wis.; Mr. T. W. Demorest, Superintendent of Motive Power, Pennsylvania Lines West of Pittsburg, Columbus, O.; The Railway Appliances Co., Chicago, Ill.; Mr. Harry S. Wainwright, locomotive engineer, Southwestern & Chatham R. R., Ashford, England; Standard Roller Bearing Co., Philadelphia, Pa., and The Webster Manufacturing Co., Chicago, Ill., photographs and blue prints.....
Also from The American Manufacturing Co., of New York City; The Buffalo Forge Co., Buffalo, N. Y.; C. W. Hunt & Co., West Brighton, N. Y., and from R. D. Wood & Co., students' catalogues for distribution to students in engineering .....
Morse Twist Drill and Machine Co., New Bedford, Mass., students' catalogues and 85 twist drills in form of charms.....
The Hersey Manufacturing Co., S. Boston, Mass., the loan of a one-inch disk meter and a sectional model of their 5-8th inch water meters....

METALLURGY AND MINERALOGY.

Mr. Henry Daugherty, Denver, Col., a very fine collection of minerals, enclosed in suitable case..... 400 00

ZOOLOGY AND ENTOMOLOGY.

S. H. Scudder, Lawrence Brunner, J. B. Smith, M. B. Slingerland, F. M.

	Value
Webster, E. P. Felt, J. L Hancock and United States Department of Agriculture, various publications	
U. S. Fish Commission, 200 specimens (110 species) of Porto Rican fishes.	
J. C. Bridwell, 150 species of insects	
James Judge, an adult male specimen of the fur seal	

In addition to the foregoing, the librarian reports the gift of 2,122 books for the library.

For all of the above gifts the trustees desire to publicly express their sense of obligation. Many of them have little value in themselves, but from additions such as these result collections which are of great benefit to the students of a university.

THE FACULTY.

The instructional force of the university during the year just closed was made up as follows: presidents, 1; professors, 47; associate professors, 12; assistant professors, 20; instructors, 13; assistants, 22; fellows, 21; librarians, 1; curators, 1.

Their positions and compensation and the position and compensation of all other employes of the university are set forth in the treasurer's report.

A number of important changes in the faculty took place during the year.

Dr. J. P. Gordy, professor of education, resigned to become the head of a teachers' college at Columbia University, New York City. In his resignation the university and the state suffered a great lass. Larger opportunity and a much larger remuneration were sufficient inducements to justify him in making the change.

Mr. W. D. Gibbs, professor of agronomy in the college of agriculture, was offered by the land grant college in New Hampshire larger compensation than the trustees under the laws of Ohio can pay to a professor. He was reluctantly released from his employment in order to accept such offer.

The loss of these two eminent men invites attention to the fact that the law limits the amount which can be paid to a professor of the Ohio Sate University to $2,500. There is no such limitation in any other of the so-called state universities of Ohio, and no board of education, so far as we can learn, is so restricted.

In view of these facts, the trustees respectfully bring the matter to the attention of your excellency and the general assembly.

The university suffered a great loss in the death of Professor C. N. Brown, head of the department of civil engineering, and dean of the college of engineering, which occured March 16, 1902.

He had been in apparently vigorous health until a few days before his demise, and the event was, therefore, a great shock to his associates and friends.

Professor Brown was a student of the university and afterwards an instructor in mathematics and civil engineering. When the department of civil engineering was created he was placed at its head, where he continued until his last illness, his administration being marked by constantly increasing power and usefulness.

At the beginning of the university year just closed he was elected by his associates in the faculty, dean of the college of engineering. In this position he had already shown administrative ability of high order. When he was taken ill he was engaged in devising plans for improvements in methors of administration of the college, and has developed a general scheme for needed buildings and equipment which has since been partially out by the engineering faculty in the plans prepared by them for an carried out by the engineering faculty in the plans prepared by them for an engineering building.
engineering building.

Professor Brown was an exacting but inspiring teacher. He was devoted to his students and his interest in and care for them did not cease when they left the university, but followed and aided them in their after struggles.

He was also devoted to the interests of the university, and though engaged in various engineering problems outside, his chief interest was in his university work, which had his first and best efforts and to which his life was freely given.

A wide circle of friends mourn his untimely death.

The other changes in the faculty are given in the president's report.

STUDENTS.

The number of students in attendance during the year was as follows:

COLLEGE OF LAW.

First semester..... 170 Second semester 170

OTHER COLLEGES.

First term ..... 1,245 Second term ..... 1,184 Third term 1,036

The total number enrolled during the year, as shown by the catalogue hereto attached, was 1,516.

The numbers in the several departments and classes and the courses of study pursued in each are set forth in the report of the president, which accompanies this report.

ESTIMATES.

The following are the estimates of expense for the year ending June 30, 1902:

Bonds and interest	$ 37,487 50
Repairs	7,000 00
Fuel and light	11,000 00
Printing and advertising	2,700 00
Roads and grounds	1,500 00
Water rates	1,300 00
Expenses of trustees	600 00
Library books and supplies	5,950 00
Repairs and extensions, heat, light and power plant	3,100 00
Salaries	208,630 00
Department apparatus and supplies	20,879 00
Chemical store room	5,032 00
Incidentals	6,000 00

The estimates for expenses of new buildings and improvements are as follows:

Finishing and furnishing law building	$ 50,000 00
Addition to chemical building	20,000 00
Veterinary building	25,000 00
Addition to observatory and equipment	6,900 00
Building for department of physics	25,000 00
Total	$438,078 50

The reports of the president of the university, the treasurer and the librarian are filed herewith and made a part of this report.

Respectfully submitted,

ALEXIS COPE, *Secretary.*

DEGREES CONFERRED.

On recommendation of the faculty the following degrees were conferred:—

BACHELOR OF SCIENCE (IN AGRICULTURE).

Harry Glenn Beale, Mt. Sterling, O.; Herbert Lucius Belden, Middlefield, O.; Albert Edward Day, Mt. Carmel, O.; LaMott Ruhlen, Plain City, O.; Freelan Wilbert Schaeffer (as of the class of 1900), Columbus, O.; Edward Lee Shaw, Newark, O.

BACHELOR OF SCIENCE (IN HORTICULTURE AND FORESTRY).

Herman Alfred Clark, Medina, O.

BACHELOR OF SCIENCE (IN DOMESTIC SCIENCE).

Mamie Faye Hill, Columbus, O.; Ida Marshall, Hemlock, O.

BACHELOR OF ARTS.

James Orlando Gauch, West Manchester, O.; Nellie Rogers Hicks, Centerburg, O.; Frederick John Muirie, Youngstown, O.; Harley Martin Plum, Ashville, O.; Cornelia Thompson Powell, Columbus, O.; Ferdinand Philip Schoedinger, Columbus, O.

BACHELOR OF PHILOSOPHY (LATIN COURSE).

William Cheney Bryant, Columbus, O.; Eleanor Eliza Carson, Harrisburg, O.; Katherine B. Clapp, Norwalk, O.; Augusta Connelley, Columbus, O.; Martha Dudley Hartford, Atlanta, Ga.; Bertha Marie Hopkins, Marysville, O.; Edith Estelle Hopkins, Marysville, O.; Cornelia Williams Miller, Columbus, O.; Glendora Mills, Marysville, O.; Helen Mills, Gallipolis, O.; Edna Esther Salm, Columbus, O.; Bessie Battelle Taylor, Columbus, O.

BACHELOR OF PHILOSOPHY (MODERN LANGUAGE COURSE).

Carl Conrad Eckhardt, Toledo, O.; Sarah Bryarly Gordon, St. Marys, O.; Elma Fogg Jennings, Eaton, O.; Caroline Annie Meade, Columbus, O.; Roy Morgan, Greenland, O.; Ada May Nichols, Chillicothe, O.

BACHELOR OF PHILOSOPHY (ENGLISH COURSE).

Gertrude Halm Bellows, Columbus, O.; William Pitt Bitner, Sandusky, O.; James William Cheney, Columbus, O.; Orville Porter Cockerill, Washington C. H., O.; Dennis Aloysius Donovan, Columbus, O.; Sara Ethel Herrick, Columbus, O.; Clara Mae Hopkins, Marysville, O.; Clara Putnam Hudson, Middleport, O.; Charles Clifford Huntington, Yellow Springs, O.; Daniel C. Jones, Jackson, O.; Max Moses Mathews, Vinton, O.; Earl Saddler McAllister, Columbus, O.; Lucy Hunt Pocock, Columbus, O.; Sara Campbell Swaney, East Liverpool, O.; William Harry Taylor, Columbus, O.; William Burroughs Woods, Garrettsville, O.

BACHELOR OF PHILOSOPHY (COURSE OF COMMERCE AND ADMINISTRATION.)

John Porter Bowles, Columbus, O.; Donald Dean Hensel, Eaton, O.; Walter Ashton Ridenour, Jackson, O.

BACHELOR OF SCIENCE.

Charles Henry Clevenger, Fletcher, O.; Ernest Doane Easton, Springboro, O.; Arthur Hungelmann, Columbus, O.; Frank Joseph Prince, Millerstown, O.; Albert John Schantz, Dayton, O.

DOCTOR OF PHILOSOPHY.

Carl Gregg Doney, B. Sc., M. A. (Ohio Wesleyan University), LL. B., Columbus, O.

MASTER OF ARTS.

Royal Albert Abbott, B. Ph., Ann Arbor, Mich.; Lamar Taney Beman, A. B. (Western Reserve), Cleveland, O.; Wilbur Latimer Dubois, B. Sc., Troy, O.; Clarence Philander Linville, B. Sc., Hagenbaugh, O.; Frank Cowen McKinney, B. A., Columbus, O.; Samuel Eugene Rasor, B. Sc., Columbus, O.; Mae Beatrice Schaff, B. Ph., Columbus, O.; John Francis Travis, B. A., Green Camp, O; Frederick Jared Tyler, B. Sc., Columbus, O.

MASTER OF SCIENCE.

William C. Mills, B. Sc., Columbus, O.

CIVIL ENGINEER.

Oliver Newton Bostwick, Mt. Sterling, O.; Clyde Greyson Conley, Newark, O.; Louis Verne Conrad, Columbus, O.; John Miller Hammond, Columbus, O.; James Franklin Hitch, Batavia, O.; Thomas Zettler Krumm, Columbus, O.; Robert Dale McKeon, Arcanum, O.; Ernest Martin Merrill, Toledo, O.; Albert Arthur Miller, Zanesville, O.; Herbert Pike Senter (in absentia), Columbus, O.; James Arthur Stoker, Gnadenhutten, O.

ENGINEER OF MINES.

George Crable, Columbus, O.; Carl Boileau Harrop, Cleveland, O.; George Frederick Holbrook, Bucyrus, O.; Frank Newton Huddleson, Columbus, O.; Horace Maley McFarland, Columbus, O.; Amasa Delano Sproat, Columbus, O.

MECHANICAL ENGINEER (IN ELECTRICAL ENGINEERING).

Frank Thomas Cavin, Spencer, O.; James Ulrick Clark, Lancaster, O.; Walter M. Dann, Columbus, O.; Roscoe Everett McIntosh, Ravenna, O.; Clifford Steele VanDyke, Ansonia, O.; Francis Edmund Wynne, Bethany, W. Va.

MECHANICAL ENGINEER.

George Theodore Frankenberg, Columbus, O.; Walter Alexander Johnson, Columbus, O.; Roy Stevenson King, Xenia, O.; William Blaine Morris, Massillon, O.; Robert Elwood Rightmire, Columbus, O.; Harry Ford Smith, Lexington, O.; Thomas Wade Stone, New Bremen, O.; Edward Wood Tanner, Zanesville, O.; Arvey Elroy Wellbaum, Brookville, O.; Harry Ernest Williams, Galena, O.; Lloyd Yost, Somerset, O.

ENGINEER OF MINES (IN CERAMICS).

Lawrence Eugene Barringer, Washington, D. C.; Walter Austin Hull, Orangeville, O.; Ray Thomas Stull, Elkland, Pa.

BACHELOR OF SCIENCE (IN CHEMISTRY).

Eugene Palmer Hapgood, Sabina, O.; Harvey Keating, Columbus, O.; William Frederick Kern, Bellaire, O.; Benjamin Creamer Parrett, Washington C. H., O.; Frank Wilbert Schwab, New Philadelphia, O.

BACHELOR OF LAWS.

Edwin George Beal, A. B. (Ohio Wesleyan University), Bucyrus, O.; Homer Z. Bostwick, B. A., Columbus, O.; William Craig Brown, A. B. (University of Wooster) Mount Pleasant, O.; Curtis Cicero Curtis, Columbus, O.; Thomas Daniel Evans, Newark, O.; Frank Gaydon Houle, A. B., A. M. (Western Reserve University), Bellevue, O.; James Byron Kahle, Ph. B. (Hiram College), Tedrow, O.; David Thatcher Keating, B. Ph., Columbus, O.; Robert James King, B. A., Zanesville, O.; John Franklin Kramer, B. A. (Ohio Normal University), Butler, O.; Lawrence Everett Laybourne, Springfield, O.; Ralph Sherman Leonard, B. A., M. A. (Denison University), Granville, O.; Owen Arthur Nash, B. A., M. A. (Denison University), Newark, O.; William Reist Pruner, Springfield, O.; Carl Fletcher Roebuck, B. Ph., Columbus, O.; Frederick H. Schoedinger, Columbus, O.; Mason Jay Snow, Columbus, O.; Homer Haven Sparks, Columbus, O.; Charles Henry Stahl, Winesburg, O.; Theodore Henry Tangemann, Kettlersville, O.; Charles A. Vail, Ph. B. (Scio College), Scio, O.; Nevin Edward Veneman, Dayton, O.; Charles Clifton Wise, Millersburg, O.; Theodore Emil Bock (as of the class of 1901), Hamilton, O.; George E. Seney, Jr. (as of the class of 1901), Toledo, O.; Frederick Rollin West (as of the class of 1901), Columbus, Ohio.

BACHELOR OF SCIENCE (IN PHARMACY).

Roy William Funk, Chesterhill, O.; Walter Alexander Landacre, Columbus, O.; Edward Nathan Webb, Rome, O.

DOCTOR OF VETERINARY MEDICINE.

Harry Wilbur Brown, Columbus, O.; Clinton Huron Sater, Sater, O.

On the recommendation of the faculty, certificates were granted to the following members of the law class showing that they had successfully and satisfactorily completed the course of study in the college of law but on account of deficient previous preparation were not entitled to a degree;

John W. Bechtol, Fayette, O.; Lawrence Hayes Clark, Cumberland, O.; William Whittier Clark, Canton, O.; Frank Wylie Dodds, Xenia, O.; Eugene Augustus Hauss, Wapakoneta, O.; Dwight George Hay, Wooster, O.; Claudius C. Hayward, Ironton, O.; William A. Hite, Thornville, O.; Edwin Ray Hummell, Carroll, O.; David Thomas Jones, Youngstown, O.; Robert Wallace Kellough, Range, O.; Oron Ellsworth Kennard, Chesterhill, O.; Cyrus Floyd Luckhart, Columbus, O.; Fred Milton McSweeney, Sidney, O.; Joseph Charles Royen, Houston, O.; George William Sheetz, New Washington, O.; Franklin Albert Shotwell, Marengo, O.; George Charles Steinemann, Minster, O.; Everett Buren Taylor, New Albany, O.; John Charles Wallace, East Liverpool, O.; James Gulick Westwater, Columbus, O.

ANNUAL REPORT OF THE PRESIDENT TO THE BOARD OF TRUSTEES.

To the HON. OSCAR TAYLOR CORSON, *President Board of Trustees, Ohio State University*:

DEAR SIR:—I have the honor to present through you to the board of trustees of Ohio State University the annual report of the president of the university for the year ending June 30th, 1902.

THE FACULTY.

During the year the faculty suffered a great loss in the death of Professor Christopher Newton Brown, which occurred on March 6, 1902.

Professor Brown was a product of the Ohio State University, having entered the institution in 1876, where he spent three years and a portion of his senior year. After a valuable experience in the field as a civil engineer, he returned to the university and served in several capacities, and at the time of his death was dean of the college of engineering. As a professor of civil engineering, Professor Brown met the high ideals of his associates and proved himself in every regard a superior officer and teacher. He combined in a rare degree ability as a disciplinarian, as a teacher and as an executive officer, and was so imbued with public spirit and love for young men as to make him an ideal college professor. His death was a severe loss to the department and to the university.

Several new appointments have been made in the faculty, to strengthen departments already organized and to meet the needs arising from the increased attendance at the university.

The year has been one of unusual activity and the harmonious co-operation of all the members of the faculty has resulted in a degree of efficiency gratifying to all friends of the university. It has been the aim of the management to make a slight increase, from year to year, in remuneration, especially to the men in the capacity of associate and assistant professors. The salaries paid at the state university in all departments are so inadequate as to render it extremely difficult to retain men whose service has proved their efficiency and usefulness. It is hoped that a more generous provision by the state will enable the university to keep men who in the interest of public education, canot be spared without serious loss.

The Colleges.

Attention is called to the statement in Part Second of this report, under appropriate headings, for detailed information as to entrance requirements, courses of study and facilities offered at the University. It is important to observe that some important changes have been made in the College of Arts, Philosophy and Science, both as to requirements for admission and the arrangement of the work within the College. The entrance requirements have been adjusted so as to conform almost precisely to the suggestions made by the National Educational Association and the report adopted by the North Central Association of Colleges and Secondary Schools. The result of these changes will be that reputable High schools maintaining the ordinary course of four years, will be able without difficulty to prepare students for matriculation in this college. Considerable latitude is given within approved limits and the same entrance requirements are made for all courses. Within the College, hereafter, but one degree will be granted, namely, Baccalaureate degree in Arts. The faculty has arranged and approved the group system in studies and has abandoned the former method of providing a large number of separate courses of instruction. No work formerly given is now omitted, but the work is arranged in suitable groups in such a way as to secure a large amount of liberty to the student and have the desired continuity in the work. On this system about one-third of the student's course is prescribed, and the elective privilege is limited by certain requirements which make it necessary for the student to pursue in each year some of the subjects of the preceding year. This results in the desired continuity and in a greater educational value of the subject studied.

Graduate Work.

During the year a graduate bulletin has been issued and provision made for the accommodation of such students as have applied for second degrees. Already fifty students are enrolled in this work, and there is reason to believe that the number will increase, and that the stimulating effect of the higher grade of work will be most beneficial to those engaged in undergraduate study. Reference is here made to the graduate bulletin for detailed information as to this work.

The Progress of the Year.

The progress of the University during the current year will be noted in the increased provision for teaching, the more liberal provision for our students and in the increased number attending the University. The teaching force in all departments numbers one hundred and thirty-eight;

the students enroled for the year number fifteen hundred and sixteen, every county of the state being represented. The general summary is as follows:

GENERAL SUMMARY.

College of Agriculture and Domestic Science—		
Graduate students	2	
Undergraduates	196	
		198
College of Arts, Philosophy and Science—		
Graduate students	47	
Undergraduates	403	
		450
College of Engineering—		
Undergraduates	585	
		585
College of Law		188
College of Pharmacy		40
College of Veterinary Medicine		67
Total		1,528
Names counted twice		12
		1,516

An examination into the records will reveal a very healthful and steady increase from year to year in attendance and general efficiency. It is gratifying to note that the University steadily wins its way in public favor and in usefulness. The presence of a considerable number of students from Porto Rico, Cuba, Argentine Republic and other foreign countries has been an interesting feature of university life and not without its benefit to the students of our own state.

The Needs of the University

It becomes necessary from year to year to repeat the former statements concerning the necessity of increased equipment. The growth of the University has been so phenomenal that the people of the State have scarcely realized the urgency of the demand for increased equipment as to teachers, apparatus and buildings. Under the present system of provision, the amount of money available for current expenses remains substantially the same from year to year. The steady increase in students, especially in technical lines, makes demands that cannot be met without a considerable expenditure of money. To maintain the high standard demanded of a University in these days and to furnish such facilities to the youth of our own state as can be commanded in other states, would seem to be the dictate of wisdom and economy. A comparison of Ohio State University with similar institutions in other states, or with the best technical schools of the East, emphasizes the inportance of keeping our facilities where no apology need be made for the work done in Ohio.

The pressure for buildings in order to have the necessary class rooms and laboratories in which to provide for students, has been so great that the chief effort has been to persuade the Legislature to make provision for this class of needs. During the present year the general assembly has continued the levy of 1902-03 as it was for 1900-01. This will enable the University to make some progress in buildings but is not adequate to the pressing needs. It will be necessary within the next two or three years to make some provision for an increased amount of money to be available for library, laboratory and ordinary expenses. The amount of money hitherto available for the purchase of books and other library material has been entirely inadequate to the needs of the library. With a very small increase from year to year in the money available for operating expenses it is evident that the increasing demands made by the growth of the University make the problem embarrasing in attempting to keep up the standards of efficiency and at the same time provide for the increasing numbers. What is true of the library is measurably true of all the laboratories and of the work of the University.

In the matter of buildings, the current year has seen some progress in the erection of Page Hall for the College of Law. The endless annoyances in the construction of public buildings will doubtless delay the completion of Page Hall far beyond the contracted time for its occupancy. The provision of the General Assembly will enable the Board to erect a building for physics and make some other additions yet to be determined upon. Until these buildings are completed great inconvenience must be endured in the matter of provision for the classes. Unless the State in the future, will make more liberal provision, and at once construct such buildings as are imperatively needed, it will be necessary to limit the attendance of our students in technical and scientific lines. Such a limitation would work a hardship in many directions, and would be discreditable to the public spirit of our citizens.

In the last annual report mention was made of a number of buildings very much needed. There seems to be no immediate prospect of securing them. A woman's building is so much needed that the lack of it has turned away a great many who otherwise would avail themselves of the facilities of the University. A library building is so much needed that its absence is remarked upon by every one who realizes the growth of the University or who comes upon the campus to study our needs. An average daily attendance of more than five hundred in the library is all out of proportion with the cramped quarters we have borrowed for the library in Orton Hall. Buildings for the College of Engineering are so much a necessity that we feel disposed to discourage attendance and to recommend our young men to go out of the state until such time as Ohio can meeet their needs. But no other institution in the State makes pro-

ivsion for this kind of education, and that institution, like Ohio State University, is crowded to the doors. Other departments have needs well worthy of consideration, but it is useless to enumerate these needs until a more generous provision is possible.

TEACHERS' COLLEGE.

In a previous report mention was made of the desirability of a college for teachers at Ohio State University. The teachers of the State have repeatedly expressed the conviction that suitable provision should be made for such work. The unequalled facilities of the University for work in collateral lines make it most desirable that such provision be made for professional study as shall more nearly meet the requirements than present accommodations. For some years the department of education has met, to a degree, this demand. There remains the necessity of reinforcement of present work by the addition of other teachers. It is highly desirable that persons who are to occupy the most prominent places in our public school system, as well as those who are to teach in our colleges, shall secure their professional training in the university atmosphere and become familiar with all the processes and problems of higher education. Such a college should at once take a rank equal to the College of Arts, Philosophy and Science, and be equipped to do such a grade of work for the teaching profession as the exacting demands of the public upon teachers indicate to be desirable. It will never be the place of the Ohio State University to compete with normal schools in the preparation of teachers for the elementary schools, but it should offer the facilities for higher educational study that will enable our college students to prepare themselves adequately for the teaching profession and teachers of experience to secure such further study and inspiration as many now desire. The educational work of the University cannot be made complete without such a college, and the hope is here expressed that the General Assembly will give the subject due consideration.

CONCLUSION.

In concluding this report it is proper to say that the year has been marked by unusual prosperity. The growth of the University indicates an increasing usefulness to the state. The problem of keeping up the excellence of the work while providing for the increasing numbers is not easy of solution.

It is gratifying to report that in the work of administration, the trustees and faculty have most cordially supported the president in his efforts to carry forward the work of the University. Public service under such conditions is a high privilege and acknowledgement is here made of the generous assistance affordeed by the University authorities.

Respectfully submitted,

W. O. THOMPSON, *President.*

TABLE I—THE WORK OF INSTRUCTORS, 1901-1902.

Subjects.	Hours per week.						Number of Students.		
	Lectures.			Laboratory.					
	First Term.	Second Term.	Third Term.	First Term.	Second Term.	Third Term.	First Term.	Second Term.	Third Term.
Agriculture.									
Butter and Cheese Making (15)	....	1	....	....	8	....	....	12	....
Breeds of Live Stock (8)*	3	....	....	2	....	....	34	....	....
Stock Feeding and Hygiene (10)	....	....	3	....	....	2	....	....	33
Farm Equipment (11)	3	....	....	2	....	....	21	....	....
Soils (12)	....	3	....	....	6	....	....	26	....
Farm Crops (13)	....	....	3	....	....	2	....	....	22
Cheese Making (25)	....	....	1	....	....	6	....	....	4
Dairy Farming (5)	....	2	....	....	2	....	....	39	....
Butter Making and Cheese Making (6)	....	....	....	....	16	....	....	38	....
Butter Making and Cheese Making (7)	....	2	....	....	....	....	....	38	....
Special	....	....	....	1	....	....	9	....	....
Thesis	....	....	....	4	4	4	7	7	6
Application of Chemistry to Agriculture (9)	....	3	....	....	2	....	....	35	....
Agronomy (19) (20)	2	2	....	4	6	....	7	6	....
Elements of Dairying (22)	1	....	....	6	....	....	10	....	....
Milk Inspection (18)	....	....	....	2	....	....	8	....	....
Stock Judging and Management (26)	....	2	....	....	4	....	....	7	....
Rural Engineering (21)	....	....	2	....	....	4	....	....	5
Agricultural Chemistry.									
Principles, Nomenclature, etc. (1)	2	....	....	6	6	....	113	....	....
Organic Chemistry (8)	....	2	....	....	6	....	....	104	....
Applications of Chemistry to Agr. (9)	....	....	2	....	....	6	....	....	66
Laboratory (4)	....	....	2	10	10	6	27	25	15
Chemistry of Milk and Milk-testing (7)	....	2	....	....	4	....	....	40	....
Laboratory (6)	....	....	....	10	10	10	3	3	2
Food Adulteration	....	....	2	....	....	6	....	....	18
American History and Political Science.									
History.									
Political History of United States (1)	8	8	8	....	....	....	71	120	52
Seminary (10)	2	2	2	....	....	....	5	5	5
American Colonial History (2) (3)	3	3	....	....	....	....	35	33	....
Constitutional and Political History (3)	....	....	3	....	....	....	....	....	28
American Political Parties (7)	3	3	3	....	....	....	6	8	7
Historical Material and Its Use (8)	1	1	....	....	....	....	17	17	....
Graduate Work, Sp. (13)	....	....	....	....	1	....	1	2	....
Thesis	....	....	....	4	....	....	16	....	....
Topical Research (9)	....	....	1	....	....	....	....	....	15

*The figures in brackets are the department numbers—for which see Part II of this report

TABLE I—THE WORK OF INSTRUCTORS, 1901–1902—Continued.

Subjects.	Hours per week.						Number of Students.		
	Lectures.			Laboratory.					
	First Term.	Second Term.	Third Term.	First Term.	Second Term.	Third Term.	First Term.	Second Term.	Third Term.
American History and Political Science—Concluded.									
History—Concluded.									
Teachers' Course (11)	....	....	1	....	....	....	....	....	9
Origin and Development of the Constitution (9)	2	....	....	....	....	....	4	....	....
Graduate Seminary (12)	2	2	2	....	....	....	4	4	4
Political Science.									
Colonial Institutions (7)	....	2	....	....	....	....	....	13	....
Municipal Government (8)	....	....	2	....	....	....	....	....	21
Government of Dependencies (6)	2	....	....	....	....	....	15	....	....
Political Institutions (1)	....	3	3	....	....	....	17	....	16
Comparative Government (1)	3	....	....	....	....	....	21	....	....
Treaties and Diplomacy (5)	....	....	2	....	....	....	....	....	8
Seminary in Political Science (11)	2	2	2	....	....	....	9	9	10
International Law (4)	2	2	....	....	....	....	9	9	....
Theories of the State (10)	2	2	2	....	....	....	4	3	2
Origin of United States Const. (9)	....	2	2	....	....	....	....	4	4
Anatomy and Physiology.									
Human Anatomy and Physiol. (1)	6	6	6	2	4	2	105	102	94
General Physiology (2)	....	....	3	....	....	1	....	....	12
Histology and Hist-Chemistry (4)	2	2	....	12	12	....	50	51	....
Bacteriology	....	4	....	....	5	5	....	83	42
Microscopy (5)	....	....	2	....	....	½	....	....	12
Thesis and Similar Work	....	....	....	5	....	3	1	....	5
Chemical Physiology (3)	....	....	3	....	....	6	....	....	48
Chemical Physiology, Dom. Sci.	....	....	2	....	....	4	....	....	7
Bacteriology, Dom. Sci.	....	....	2	....	....	½	....	....	8
Architecture and Drawing.									
Freehand Drawing (1)	....	....	....	48	24	12	269	242	33
Lettering (2)	....	....	5	....	....	17	....	....	196
Mechanical Drawing (3)	5	12	6	20	8	22	141	128	103
Draughting and Blue Printing (4)	....	1	....	....	4	....	....	4	....
Photography (7)	1	....	1	4	....	8	14	....	43
Mechanical Drawing (8)	1	1	3	2	2	4	20	12	2
Mechanical Drawing (10) (11)	2	....	1	6	....	8	68	....	4
Pen Drawing (14) (15)	....	....	1	4	....	2	11	....	4
Pen Drawing (12)	....	....	....	....	4	4	....	4	4
Painting (17)	....	....	....	4	....	....	15	....	....
Drawing (15)	....	1	....	....	2	....	....	10	....
Technical Drawing (5)	....	....	....	4	....	....	38	....	....
Architecture (9, 3, 10, 11)	3	3	3	....	....	....	6	5	4

TABLE I—THE WORK OF INSTRUCTORS, 1901-1902—Continued.

Subjects.	Hours per week.						Number of Students.		
	Lectures.			Laboratory.					
	First Term.	Second Term.	Third Term.	First Term.	Second Term.	Third Term.	First Term.	Second Term.	Third Term.
Architecture and Drawing— Concluded.									
Architecture (12, 13, 14)	....	....	....	4	4	4	5	5	4
Architecture (15, 16, 17)	2	....	1	6	4	6	3	3	3
Architecture (5, 7)	2	3	....	2	4	....	3	1	....
Architecture (3)	....	1	....	....	8	....	....	1	....
Drawing (18) (19)	....	....	....	....	6	17	....	30	25
Astronomy.									
Astronomy and Geodesy (2)	3	3	....	6	4	8	....	14	12
General Astronomy (1)	2	2	2	....	....	....	16	13	12
Meteorology (3)	....	....	2	....	....	....	....	....	11
Botany.									
Ecology (21)	2	....	....	2	10	....	16	2	....
Morphology (22)	2	....	....	....	2	....	....	13	....
Physiological Botany (6)	3	....	....	4	....	....	33	....	....
Medical Botany (4)	....	....	....	....	4	....	....	7	....
Systematic and Physiol'al Bot'y (3).	3	....	....	4	....	....	8	....	....
Physiological and Economic Bot'y (7)	....	3	....	....	4	....	....	32	....
Laboratory and Field Work (24)	....	....	....	4	10	6	1	4	1
Elementary Botany (1)	....	....	3	....	....	2	....	....	75
Economic Botany (8)	....	....	3	....	....	4	....	....	28
Systematic Botany (23)	....	....	2	....	....	2	....	....	10
Dendrology (9)	....	....	....	4	....	....	2	....	....
Laboratory Work, Histology and Physiology (25)	....	....	....	10	....	10	3	....	4
Advanced Laboratory Work (26)	....	....	....	6	6	10	1	1	1
Laboratory Systematic Botany (27)	....	....	....	10	....	10	1	....	1
Research Work (28)	....	....	....	10	10	10	1	1	1
Research Work, Morphology (29)	....	....	....	14	6	10	2	2	2
Minor Investigations (32)	....	....	....	4	2	4	2	1	4
Special Investigation	....	....	....	10	10	10	2	3	2
Thesis	....	....	....	4	4	4	2	2	2
Laboratory, Vegetable Pathology (11)	....	....	....	....	10	....	....	3	....
Laboratory Work (16)	....	....	....	....	....	4	....	....	1
Clay Working and Ceramics.									
Ceramic Chemistry (3)	....	....	....	....	....	20	....	....	8
Lectures (4)	5	....	....	....	....	....	11	....	....
Analysis of Clays and Minerals (2)	....	1	....	....	10	....	....	10	....
Lectures (6)	....	....	10	....	....	....	....	....	9
Anaylsis of Glasses and Glazes (1, 7).	2	....	....	15	10	....	13	2	....
Manufacture of Bricks (5)	....	5	....	....	3	....	....	10	....
Thesis and Similar Work (15)	1	....	....	15	20	10	1	1	3

TABLE I—THE WORK OF INSTRUCTORS, 1901-1902—Continued.

Subjects.	Hours per week.						Number of Students.		
	Lectures.			Laboratory.					
	First Term.	Second Term.	Third Term.	First Term.	Second Term.	Third Term.	First Term.	Second Term.	Third Term.
Concluded.									
Laboratory (9, 10, 11)	1	....	....	10	10	20	6	5	5
Cement Lectures (12)	....	5	....	....	....	....	....	5	....
Practice (17)	....	....	....	....	8	....	....	4	....
Ceramic Chemistry (7)	1	....	....	10	....	....	1	....	....
Chemistry.									
Elementary (1)	2	2	2	3	3	3	70	58	43
Elementary (7, 12)	2	2	1	10	6	6	275	225	167
Qualitative Analysis (2)	1	1	....	6	4	....	10	10	....
Quantitative Analysis (20)	1	1	1	10	8	8	17	17	10
Organic (8, 9)	5	1	2	....	8	6	18	9	6
Advanced Chemistry (27*b*)	....	2	....	10	6	10	3	6	5
Applied Chemistry (16)	....	4	....	....	....	....	....	5	....
Toxicology (11)	....	....	4	....	....	....	....	....	10
Inorganic Preparations (17)	1	....	1	8	....	8	10	....	11
Sanitary Analysis (15)	....	....	2	....	....	4	....	....	7
Physical Chemistry (21)	2	2	2	....	....	....	28	28	21
Research Work (29)	....	....	....	10	10	10	2	3	4
Civil Engineering.									
Land Surveying (1)	10	....	....	16	....	....	49	....	....
Topography (4)	....	1	....	....	16	....	....	41	....
Railroad Surveying (2)	....	....	15	....	....	12	....	....	33
Topographical Surveying (3)	1	....	....	18	....	....	18	....	....
Stereotomy (6)	....	4	....	....	8	....	....	26	....
Bridge Strains (7)	....	....	5	....	....	....	....	....	15
Organic Chemistry (22)	....	1	....	....	8	....	....	6	....
Bridge Designing (8)	2½	....	....	5	....	....	18	....	....
Civil Engineering Laboratory (14)	....	....	....	....	8	....	....	18	....
Sanitary Engineering (10)	....	....	5	....	....	....	....	....	12
Masonry Construction (15)	5	....	....	....	....	....	18	....	....
Highways (16)	5	....	....	....	....	....	21	....	....
Railway Location (17)	....	5	....	....	....	....	....	18	....
Water Supply (18)	....	....	5	....	....	....	....	....	13
Trusses (19)	....	....	10	....	....	....	....	....	25
Surveying (21)	....	....	3	....	....	2	....	....	10
Thesis and Similar Work	....	....	....	....	....	10	....	....	12
Drawing of Engineer'g Structures (24)	....	1	....	....	8	....	....	22	....

TABLE I—THE WORK OF INSTRUCTORS, 1901–1902—Continued.

Subjects.	Hours per week.						Number of Students.		
	Lectures.			Laboratory.					
	First Term.	Second Term.	Third Term.	First Term.	Second Term.	Third Term.	First Term.	Second Term.	Third Term.
Domestic Science.									
Domestic Economy (7, 9)	1	....	1	6	....	6	7	....	7
Domestic Economy (1, 2, 3)	1	1	1	6	6	6	9	9	7
Domestic Economy (4, 5, 6)	1	1	1	6	6	6	5	14	13
Domestic Economy (8, 10)	....	1	2	....	6	....	....	7	2
Thesis Work	....	....	....	2	....	6	1	....	2
Economics.									
Elements of Political Economy (1)	8	4	8	....	....	4	71	139	70
Practical Problems in Economics (5, 6, 7)	2	2	2	....	....	....	18	17	17
History of Industrial Society (2)	2	2	....	....	....	....	21	42	....
Commerce and Trade (10)	3	3	3	....	....	....	11	10	10
Industrial and Financial History of the U. S. (3)	....	....	2	....	....	....	....	....	27
Seminary Economics (15)	2	2	2	....	....	....	6	6	6
Finance (8)	2	2	....	....	....	....	14	12	....
Money and Banking (9)	....	....	2	....	....	....	....	....	16
Sociology (11, 12)	3	3	3	....	....	....	13	12	12
Seminary Sociology (17*f*)	2	2	2	2	2	2	7	9	6
Statistics (17*g*)	....	....	....	1	....	....	1	....	....
Thesis and Special	....	....	....	....	2	4	5	5	4
Seminary (17*d*)	....	....	....	....	2	....	....	1	....
Transportation (4)	....	....	2	....	....	....	....	....	45
Economic Literature and Legislation (14)	1	1	1	....	....	....	14	14	14
Education.									
Elementary Educat'l Psychology (1)	3	3	3	....	....	....	15	14	12
Educational Theories (2)	1	1	1	....	....	....	5	7	....
History of Education (3)	4	4	3	....	....	....	3	1	1
Modern Educational Systems (6)	2	2	2	....	....	....	3	3	1
Seminar in Educat'l Psychology (9)	2	1	....	2	4	4	2	2	4
Graduate Work, History of Education	1	1	1	....	....	....	1	1	1
Child Study (4)	2	2	2	....	....	....	7	7	8
Electrical Engineering.									
Special Laboratory	....	....	....	....	....	6	....	....	2
Electrical Engineering (6)	2	2	....	....	....	....	44	39	....
Electrical Engineering (7)	....	....	....	12	20	....	24	38	....
Direct Current Dynamos (8)	....	4	....	....	....	....	....	9	....
Alternating Current Circuits of Machinery (10)	3	3	....	....	....	....	8	6	....
Transmission and Distribution (12)	....	2	....	....	....	....	....	7	....
Dynamo Laboratory (11)	....	....	....	6	8	6	8	6	5

TABLE I—THE WORK OF INSTRUCTORS, 1901-1902—Continued.

Subjects.	Hours per week.						Number of Students.		
	Lectures.			Laboratory.					
	First Term.	Second Term.	Third Term.	First Term.	Second Term.	Third Term.	First Term.	Second Term.	Third Term.
Concluded.									
Applications (13)	....	....	5	....	....	....	....	....	6
Elementary Dynamo Lab. (9)	....	....	....	....	....	8	....	....	10
Electrical Design (14)	....	....	....	....	8	8	....	5	5
Thesis	....	....	....	....	....	....	....	....	6
English Literature.									
Introduction to English Literature (1)	8	8	8	....	....	....	87	77	72
The English Bible (7)	1	1	1	....	....	....	9	8	6
Modern Novel (11)	3	3	....	....	....	....	24	18	....
Chaucer (13)	3	....	....	....	....	....	8	....	....
Masterpieces (17)	3	3	3	....	....	....	9	7	7
Thesis Work	....	....	....	6	4	6	6	4	6
Literary Problems (16)	2	2	2	....	....	....	10	9	9
Current Literature (19)	2	....	2	....	....	....	5	....	3
Elizabethan Drama (10)	3	3	3	....	....	....	16	14	12
Development of Types (22)	1	1	3	....	....	....	2	2	2
Victorian Literature (18)	2	2	2	....	....	....	13	14	10
Translations (20)	1	1	....	....	....	....	1	1	....
Graduate (21)	1	1	1	....	....	....	1	2	2
Milton (14)	....	3	....	....	....	....	....	7	....
Current Literature (19)	....	2	....	....	....	....	....	3	....
American Authors (12)	....	....	3	....	....	....	....	....	21
Modern Plays (15)	....	....	3	....	....	....	....	....	10
European History.									
From Accession of Stuarts to Present Time (1)	6	....	....	....	....	....	71	....	....
Political and Constitutional History of England	3	3	3	....	....	....	18	18	13
Renaissance (2)	....	6	....	....	....	....	65	....	....
Modern Europe	....	....	6	....	....	....	....	....	59
The Eastern Question	....	....	3	....	....	1	....	....	7
Thesis	....	....	....	3	7	....	2	2	....
Historical Bibliography (13)	....	2	2	....	....	2	....	3	3
History of European Colonies (10)	3	3	....	....	....	....	5	5	....
History of France (12)	2	....	....	....	....	....	6	....	....
Geology.									
Inorganic Geology (11)	3	....	....	2	....	....	10	....	....
Elementary Geology (4)	....	2	....	....	1	....	....	2	....
General Geology (2)	3	....	....	6	....	....	43	....	....
Paleontology (14)	....	....	....	12	19	14	4	5	3
Petrography (19, 7)	....	1	....	10	12	10	3	9	2

TABLE I—THE WORK OF INSTRUCTORS, 1901–1902—Continued.

Subjects.	Hours per week.						Number of Students.		
	Lectures.			Laboratory.					
	First Term.	Second Term.	Third Term.	First Term.	Second Term.	Third Term.	First Term.	Second Term.	Third Term.
Concluded.									
Physical Geography (1)	....	....	5	....	....	....	....	....	35
Economic Geology (5, 6)	....	6	....	....	1	....	....	....	45
Thesis Work	....	....	....	....	....	2	....	....	....
Physiography (17)	2	2	2	....	....	....	4	5	4
Historical Geology (12)	....	3	....	....	2	....	....	10	....
Areal Geology (15)	....	....	....	4	....	4	1	....	1
Field Geology (13)	....	....	....	....	....	16	....	....	11
German Language and Literature.									
Elementary German (1)	24	20	20	....	....	....	219	175	137
Science Reading (2)	8	8	8	....	....	....	66	46	33
German Literature (4)	8	8	8	....	....	....	49	44	38
The German Drama (10)	....	3	3	....	....	....	....	24	21
The German Prose (10)	3	....	....	....	....	....	24	....	....
Faust I. (11)	2	2	2	....	....	....	10	10	10
Colloquial Exercises (12)	2	2	....	....	....	....	10	10	....
Phonetics (21)	1	....	....	....	....	....	12	....	....
Sanskrit (20)	2	2	....	....	....	....	1	1	....
Gothics (14)	2	....	....	....	....	....	9	....	....
Kulturgeschichte (22)	....	1	1	....	....	....	....	6	6
Thesis	....	....	....	....	....	5	....	....	5
Deutscher Aufsatz (13)	....	....	2	....	....	....	....	....	8
Middle High German (16)	....	....	3	....	....	....	....	....	4
Comparative Grammar (70)	....	2	....	....	....	....	....	3	....
Old High German (15)	....	....	3	....	....	....	....	....	7
Greek Language and Literature.									
Elementary Greek	5	5	5	....	....	....	9	8	8
Xenophon's Hellenica (7)	4	....	....	....	....	....	20	....	....
Epic Poetry (19)	2	....	....	....	....	....	4	....	....
Lysias (10)	4	....	....	....	....	....	19	....	....
Thucydides (13)	3	....	....	....	....	....	5	....	....
Ancient Art (22)	2	2	....	....	....	....	18	18	....
Demosthenes (15)	....	....	3	....	....	....	....	....	5
Private Life of Greeks (23)	....	....	2	....	....	....	....	....	24
Herodotus and Greek Prose (8)	....	4	....	....	....	....	....	18	....
Plato: Apology, Crito, Phaedo (11)	....	4	....	....	....	....	....	17	....
Sophocles: Antigone (20)	....	3	....	....	....	....	....	4	....
Plato: Protagoras (14)	....	3	....	....	....	....	....	4	....
Homer: Odyssey (9)	....	....	4	....	....	....	....	....	18
Homer: Iliad (12)	....	....	4	....	....	....	....	....	17
Post-classical Greek (21)	....	....	3	....	....	....	....	....	4

TABLE I—THE WORK OF INSTRUCTORS, 1901–1902—Continued.

Subjects.	Hours per week.						Number of Students.		
	Lectures.			Laboratory.					
	First Term.	Second Term.	Third Term.	First Term.	Second Term.	Third Term.	First Term.	Second Term.	Third Term.
Horticulture.									
Elements of Horticulture (1, 2, 3)	3	3	6	3	4	6	21	3	28
Pomology and Viticulture (5)	2	....	....	4	....	....	13	....	....
Vegetable Gardening and Seed Growing (6)	....	6	....	....	4	....	....	19	....
Small Fruit Culture (7)	....	....	3	....	....	3	....	....	8
Elements of Floriculture (8)	2	....	....	1	....	....	4	....	....
Home Flower Gardening (10)	....	2	2	....	1	2	....	6	8
Arboriculture (11)	1	....	....	2	....	....	9	....	....
Forestry (12)	....	2	....	....	2	....	....	12	....
Landscape Gardening (13)	....	....	2	....	....	2	....	....	8
Thesis	....	....	....	4	1	2	1	1	1
Industrial Arts and Shop Work.									
Industrial Arts.									
Tools and Machines (1)	3	3	3	....	....	....	5	3	3
Design (2)	....	....	....	....	6	6	....	3	3
Workshop Appliances (5)	....	....	3	....	....	....	....	....	13
Machine Design	....	....	....	....	....	6	....	....	11
Shop Work.									
Carpentry and Pattern Making (7, 1)	....	....	....	10	12	22	63	60	15
Forging (11, 2)	....	....	....	10	20	24	54	58	41
Foundry Work (3)	....	....	....	10	....	....	43	....	....
Chipping and Filing (4)	....	....	....	10	10	12	32	35	18
Machine Work (13)	....	....	....	....	6	12	....	28	23
Advanced Machine Work (14)	....	....	....	6	6	6	34	8	8
Advanced Pattern Making (9)	....	....	....	....	6	12	....	16	6
Advanced Forging (12)	....	....	....	....	6	6	....	1	4
Advanced Machine Work (15)	....	....	....	....	8	6	....	16	1
Thesis Work	....	....	....	....	....	6	....	....	3
Latin.									
Cicero (1)	12	....	....	....	....	....	53	....	....
Terence (6)	....	....	8	....	....	....	....	....	38
Horace: Odes (3)	....	....	12	....	....	....	....	....	38
Pliny (4)	8	....	....	....	....	....	40	....	....
Prose Composit'n and Translat'n (19)	2	2	2	....	....	....	3	3	2
Tacitus: Historæ (7)	3	....	....	....	....	....	4	....	....
Cicero: De Natura Decorum (13)	3	3	....	....	....	....	3	4	....
Teachers' Course (18)	2	2	2	1	....	1	9	10	10
Linguistics and Inscriptions (23)	2	2	2	....	....	....	2	1	1

TABLE I—THE WORK OF INSTRUCTORS, 1901-1902—Continued.

Subjects.	Hours per week.						Number of Students.		
	Lectures.			Laboratory.					
	First Term.	Second Term.	Third Term.	First Term.	Second Term.	Third Term.	First Term.	Second Term.	Third Term.
Concluded.									
Livy (2)	....	12	....	....	....	....	....	40	....
Tacitus: Germania and Agricola (5)	....	8	....	....	....	....	....	39	....
Juvenal: Satires (8)	....	3	....	....	....	....	....	6	....
Martial: Selected Epigrams (9)	....	....	3	....	....	....	....	....	5
Horace: Satires (15)	....	....	3	....	....	....	....	....	4
Pharmaceutical Latin (26)	4	4	4	....	....	....	16	5	3
Mathematics.									
Elementary Algebra (1)	5	....	....	....	....	....	26	....	....
Elementary Algebra (2)	5	5	5	....	....	....	20	18	18
Plane Geometry (3, 3*a*)	5	5	....	....	....	....	26	32	....
Solid Geometry (13)	....	5	....	....	....	....	....	22	....
Plane Trigonometry (14)	60	....	5	....	....	....	236	....	21
Analytical and Spherical Trigonometry (15)	....	20	....	....	....	....	....	190	....
College Algebra (16)	....	30	....	....	....	....	....	204	....
Plane Analytics (17)	....	....	50	....	....	....	....	....	183
Space Analytics (18)	25	....	....	....	....	....	146	....	....
Differential Calculus (19)	....	30	....	....	....	....	....	124	....
Integral Calculus (20)	....	....	30	....	....	....	....	....	110
Differential Equations (11)	1	....	....	....	....	....	22	....	....
Mechanics (26, 27)	15	20	15	....	....	....	67	63	53
College Algebra (21)	12	....	....	....	....	....	119	....	....
Problems on all Past Work (24)	1	1	1	....	....	....	6	5	6
Advanced Mathematics (25)	9	7	8	5	....	....	13	13	13
Trigonometry (22)	....	12	....	....	....	....	....	92	....
Analytical Geometry and Calculus (23)	....	....	12	....	....	....	....	....	74
Mechanical Engineering.									
Mechanism (3)	....	10	4	....	....	....	....	38	22
Thermodynamics (34)	....	5	....	....	....	....	....	13	....
Experimental Laboratory (12, 14, 15 17, 30)	....	1	....	8	16	6	29	35	12
Machine Design (18, 19)	5	5	....	....	....	10	15	12	12
Hydraulic Machinery (31)	....	....	3	....	....	....	....	....	14
Timber and Masonry (22)	....	5	....	....	....	....	....	22	....
Experimental Eng'ing Lab't'y (27, 25)	....	....	....	10	....	14	14	....	23
Experimental Eng'ing Laboratory (28)	....	....	....	4	....	4	7	....	7
Power Plants (32)	....	....	5	6	....	....	....	....	33
Graduate Work	....	....	....	....	....	....	3	....	....
Care of Boiler and Engine (26)	....	1	....	....	....	....	....	40	....
Theses (21)	....	....	....	....	2	4	4	12	12
Steam Engine Boilers (33)	5	....	....	....	....	....	25	....	....
Experimental Lab. (29)	....	....	....	6	....	....	5	....	....

TABLE I—THE WORK OF INSTRUCTORS, 1901-1902—Continued.

Subjects.	Hours per week.						Number of Students.		
	Lectures.			Laboratory.					
	First Term.	Second Term.	Third Term.	First Term.	Second Term.	Third Term.	First Term.	Second Term.	Third Term.
Metallurgy and Mineralogy.									
Metallurgy (4)	5	5	....	....	....	....	49	38	....
Metallurgical Laboratory (5)	2	2	2	10	21	10	30	24	25
Ore Dressing (8)	2	....	....	....	....	....	11	....	....
Assaying (6)	....	1	....	16	....	....	16	....	....
Mineral Chemistry (9)	....	....	5	....	....	....	....	....	5
Mineralogy (2)	....	....	3	....	....	....	....	....	35
Determinative Mineralogy (3)	....	....	1	....	....	10	....	....	10
Thesis and Similar Work	....	....	....	....	....	2	....	....	6
Military Tactics and Science.									
Military Drill	4	....	4	....	....	....	632	....	394
Tactics	....	2	....	....	....	....	....	70	....
Mine Engineering.									
Mine Surveying (1)	5	....	....	9	....	....	2	....	....
Ventilation and Haulage (2)	....	5	....	....	2	....	....	3	....
Mine Engineering (5)	5	5	5	1	2	....	9	9	8
Mine Operating (3)	....	....	5	....	....	2	....	....	3
Mine Surveying (4)	5	....	....	9	....	....	12	....	....
Thesis Work and Special	....	....	....	....	....	5	....	....	7
Metallurgical Construction (7)	....	....	....	....	6	....	....	6	....
Special	....	....	....	5	....	....	1	....	....
Plans and Specifications (6)	....	....	2	....	....	6	....	....	8
Pharmacy.									
Materia Medica (12)	3	....	....	....	....	....	8	....	....
Pharmacy (6, 7)	3	2	....	....	10	....	22	10	....
Dispensatories (8)	....	....	2	....	....	10	....	....	9
Pharmaceutical Chemistry (9)	2	....	....	10	....	....	10	....	....
Extemporaneous Chemistry (10)	....	2	....	....	10	....	....	10	....
Lectures and Dispensing Practice (11)	....	....	2	....	....	10	....	....	10
Materia Medica (13)	....	3	....	....	....	....	....	7	....
Materia Medica and Therapeutics (14)	....	....	3	....	....	....	....	....	7
Pharmaceutical Assaying (15)	2	....	....	10	....	....	2	....	....
Methods of Manufacture (16)	....	2	....	....	10	....	....	2	....
Thesis	....	....	....	10	10	10	3	2	2
Special	....	2	....	....	....	4	....	5	1
General Pharmacy (17)	....	....	2	....	....	10	....	....	2
Pharmacy (Veterinary Students) (12, 13, 18)	5	5	1	....	....	10	16	16	12

TABLE I—THE WORK OF INSTRUCTORS, 1901-1902—Continued.

Subjects.	Hours per week.						Number of Students.		
	Lectures.			Laboratory.					
	First Term.	Second Term.	Third Term.	First Term.	Second Term.	Third Term.	First Term.	Second Term.	Third Term.
Philosophy.									
General Psychology (15)	4	....	....	....	....	....	45	....	....
General Psychology (18)	6	6	....	....	....	....	34	32	....
Logic (16)	....	4	....	....	....	....	....	43	....
Logic (19)	....	6	....	....	....	....	....	36	....
History of Modern Philosophy (21)	....	3	3	....	....	....	....	17	14
His. ofAncient and Medieval Phil. (22)	3	....	....	....	....	....	2	....	....
Physiology and Exp. Psychology (29)	1	1	....	5	5	....	3	4	....
Philosophy of Religion (28)	2	2	2	10	10	5	6	5	3
Ethics (20)	3	....	....	....	....	....	14	....	....
Thesis	....	....	....	....	....	1½	....	....	4
Conspectus of Philosophy (23)	3	....	....	12	....	....	6	....	....
Advanced Psychology (26)	2	2	2	....	....	....	4	4	2
Philosophy of Spinoza	1	1	....	....	....	....	1	1	....
Metaphysics (25)	2	....	3	....	....	....	3	....	2
Theory of Knowledge (24)	....	3	....	....	6	....	....	4	....
Epistemology	....	2	2	....	....	....	....	3	3
Experimental Psychology	....	....	1	5	5	5	1	1	5
Ethics (17)	....	....	4	....	....	....	....	....	44
Research in Psychology	....	....	....	....	....	10	....	....	1
Origin of Religion	....	....	1	....	....	....	1	....	....
History of Ethics	....	....	1	....	....	....	1	....	....
Physical Education									
Young men	....	....	....	10	17½	....	200	480	....
Young women	....	....	....	12	12	12	100	100	100
Physics									
Elementary Physics (1)	10	10	....	....	....	....	90	60	....
Mechanics and Heat (2)	8	8	8	....	....	....	166	137	107
Problems (3)	4	4	4	....	....	....	55	47	37
Electricity and Magnetism (4)	3	....	....	....	....	....	10	45	39
Physical Laboratory	....	....	....	30	25	21	14	39	50
Mechanics, Sound and Heat (11)	1	1	1	12	12	12	33	26	25
Electricity and Magnetism	....	....	....	....	....	....	....	....	....
Rhetoric and English Language									
Paragraph Writing (11)	22	22	22	30	30	30	409	380	365
Practical Rhetoric (5) (52)	....	21	....	....	14	....	....	351	....
Expository Writing (2)	10	8	....	....	15	4	201	45	57
Advanced Composition (10)	1	1	1	4	4	4	17	16	11
Rapid Writing (55) (56)	1	1	....	2	2	....	27	27	160
Brief Making and Argument (3)	....	10	10	....	15	15	....	187	160

TABLE I—THE WORK OF INSTRUCTORS, 1901-1902—Continued.

Subjects.	Hours per week.						Number of Students.		
	Lectures.			Laboratory.					
	First Term.	Second Term.	Third Term.	First Term.	Second Term.	Third Term.	First Term.	Second Term.	Third Term.
Concluded.									
Short Stories (4)	3	2	....	5	2	....	25	24	....
Debates (23)	2	2	....	....	....	....	9	8	....
Oratory (25)	2	2	2	....	....	....	4	4	4
Theories of Style (8)	....	3	....	....	....	5	....	24	....
Poetics (6)	....	3	....	....	5	....	25	....	....
Studies in Exposition (58)	....	3	....	....	....	....	....	11	....
Rhetorical Theory and Criticism (20)	4	4	4	8	8	8	8	6	6
The Teaching of English (13) (15)	1	1	1	....	....	....	14	13	13
History of the English Language (15)	2	2	2	....	....	....	65	51	47
Old English (16)	2	2	2	....	....	....	24	17	15
Middle English Prose and Poetry (18)	2	2	2	....	....	....	6	2	2
Historical English Grammar (74)	....	2	....	....	....	....	....	2	....
Development of Prose (70)	....	2	....	....	....	....	....	32	....
Extempore Speaking (24)	....	2	....	....	....	....	....	8	....
Problems in Rhetoric and Criticism (12)	2	2	2	2	2	2	11	7	7
Essentials of Oral Discourse (21)	11	11	11	....	....	....	420	388	362
Romance Languages *French*									
Elementary French (1)	16	16	16	....	....	....	162	139	128
Modern French Literature (2)	8	8	8	....	....	....	66	60	57
Recent French Prose Writers (9)	....	2	....	....	....	....	....	17	....
Advanced Prose Composition (7)	1	1	1	....	....	....	12	13	12
French Comedy (4)	3	....	....	....	....	....	29	....	....
French Tragedy (5)	....	3	....	....	....	....	....	29	....
Literary Criticism (8)	2	....	....	1	....	....	16	....	....
Seventeenth Century Prose (6)	....	....	3	....	....	....	....	....	21
Practice in Speaking and French Writing (10)	....	....	2	....	....	....	....	....	12
Italian Elementary (1)	2	2	2	....	....	....	6	5	3
Science Reading (3)	4	4	4	....	....	....	6	6	5
Spanish (1)	4	4	4	....	....	....	35	26	21
Seminary (15)	3	3	3	2	1	....	5	5	5
Veterinary Medicine									
Anatomy (28)	5	....	....	....	....	....	25	....	....
General Pathology (29)	....	5	....	....	....	....	....	20	....
Special Pathology (30)	....	....	5	....	....	....	....	....	20
General Surgery (24)	3	....	....	....	....	....	16	....	....
Clinic (19)	....	3	....	12	12	12	17	16	17
Special Pathology (20, 21)	3	3	3	....	....	....	9	6	6
General Therapeutics (22)	....	....	3	....	....	....	....	....	6

TABLE I—THE WORK OF INSTRUCTORS, 1901-1902—Concluded.

Subjects.	Hours per week.						Number of Students.		
	Lectures.			Laboratory.					
	First Term.	Second Term.	Third Term.	First Term.	Second Term.	Third Term.	First Term.	Second Term.	Third Term.
Veterinary Medicine Concluded.									
Lectures and General Pathology (14).	4	....	....	2	....	....	15	....	....
Osteology (11)	5	....	....	15	....	....	49	....	....
Meat Inspection (27)	....	4	....	....	....	....	....	....	....
Special Pathology (15, 16)	....	3	3	....	....	....	....	16	14
Surgical Diseases and Operations (18)	3	3	3	....	....	....	8	15	14
Myology (12)	....	5	....	....	20	....	....	46	....
Neurology (13)	....	....	5	....	....	20	....	....	45
Principles of Horse-shoeing (26)	3	....	....	....	....	....	10	....	....
Obstetrics (23)	....	....	3	....	....	....	....	....	11
Canine Disease (31) (32)	3	3	....	....	....	....	6	6	....
Opthalmology (33)	....	....	2	....	....	2	....	....	7
Practice in Operating (25)	....	....	....	....	6	....	....	6	....
Pathology Laboratory (34) (36)	1	....	....	6	6	6	7	14	14
Thesis	....	....	....	....	6	....	6	3	3
Veterinary Medicine (Dairying)	....	3	....	....	....	....	....	15	....
Zoology									
Comparative Zoology	4	4	4	8	8	8	76	73	63
Com. Anatomy of Vertebrates (2)	1	1	1	8	8	8	10	10	9
Economic Entomology (4)	1	1	3	2	2	2	5	7	6
Thesis	....	....	....	4	4	4	2	4	2
Helminthology (8)	1	....	....	....	....	....	13	....	....
Special Entomology (9) (10) (11)	1	1	1	6	8	6	3	2	2
Invertebrate Morphology (15, 16, 17)	1	1	1	8	8	8	5	4	2
Invertebrate Embryology (18)	1	1	1	8	8	8	3	3	2
Comparative Neurology (21)	1	1	1	8	8	8	5	5	5
Entomology (23)	1	1	1	8	8	8	3	3	3
Ornithology (24)	....	....	1	4	4	2	2	2	2
Economic Entomology (3)	....	....	3	....	....	....	....	....	1
Special	....	....	....	....	....	20	....	....	1

TABLE II—SHOWING THE WHOLE NUMBER OF DEGREES IN COURSE CONFERRED SINCE THE FOUNDING OF THE UNIVERSITY.

	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.	1889.	1890.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	1902.
Bachelor of arts	1	1	6	2	2	1	5	4	6	8	6	1	7	2	6	9	12	19	13	17	18	8	14	16	6
Bachelor of philosophy	....	....	....	2	....	2	2	1	1	2	6	7	4	8	8	5	5	19	26	27	27	31	38	37	37
Bachelor of science	5	5	1	2	5	3	2	4	2	4	4	8	2	10	7	11	7	9	4	10	10	2	7	11	5
Bachelor of science in agriculture	....	....	....	....	....	....	....	1	1	....	....	....	2	3	3	....	....	2	4	4	5	5	7	6	6
Bachelor of science in chemistry	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	1	7	5
Bachelor of science in D. Science	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	6	2
Bachelor of science in H., F	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	3	1	1	1	2	1	1	....	1
Bachelor of science, I. Arts	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	1	....	....	....	...
Bachelor of science in pharmacy	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	1	3
Civil engineer	....	....	....	....	....	1	1	1	3	3	4	1	2	2	7	9	7	9	11	4	8	7	3	10	11
Mechanical engineer	....	....	1	....	2	4	1	3	1	2	4	2	3	2	5	2	1	2	4	9	5	6	9	6	11
Electrical engineer	....	....	....	....	....	....	....	....	....	....	....	....	....	....	4	9	8	15	17	13	10	7	11	4	6
Engineer of mines	....	....	1	1	....	....	1	2	4	1	4	2	....	....	1	1	4	1	6	3	2	3	3	2	6
Engineer of mines, in ceramics	....	....	....	....	....	....	....	....	....	3	....	2	3	6	5	5	3	11	12	11	7	....	....	....	3
Graduate in pharmacy	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	1	....	....	....	...
Master of pharmacy	....	....	....	....	....	....	....	....	....	1	....	1	4	....	4	5	....	4	2	3	....	....	4	4	...
Doctor of veterinary medicine	....	....	....	....	....	....	....	....	....	....	....	1	1	1	2	....	....	2	....	4	4	3	8	6	2
Master of arts	....	....	....	1	....	....	....	....	....	....	....	1	1	2	2	....	2	....	3	3	2	3	3	2	9
Master of science	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	2	....	1	....	....	....	1
Master of agriculture	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	1	1	....	....	...
Master of science in H. and F	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	...
Doctor of philosophy	....	1	....	....	....	....	....	....	....	....	....	....	1	....	....	....	1	....	....	....	....	....	....	....	1
Doctor of science	....	....	....	....	....	....	....	....	....	....	....	....	....	....	9	18	15	16	6	23	22	21	25	17	26
Bachelor of laws	....	....	....	....	....	....	....	....	....	....	....	....	....	....	2	4	2	....	6	....	....	....	....	....	...
Master of laws	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	...
Totals	6	7	9	8	9	11	12	16	18	24	28	26	30	36	65	79	70	112	118	135	126	99	137	135	141

TABLE III—SHOWING THE NUMBER OF STUDENTS IN THE GENERAL TECHNICAL AND PROFESSIONAL COURSES.

	1890-91.	1891-92.	1892-93	1893-94	1894-95.	1895-96.	1896-97.	1897-98.	1898-99.	1899-1900.	1900-1901.	1901-1902.
General Courses (College of Arts)...	137	151	194	245	256	322	327	358	371	419	439	403
Technical Courses (other Colleges ex-Law)	166	259	381	368	424	453	453	511	541	603	771	888
Professional Courses (College of Law)	....	55	67	72	65	100	132	148	191	201	220	188
*Graduate students & summer school	2	....	....	1	....	94	97	133	75	45	51	49
Lake Laboratory (Summer)	....	....	....	....	....	....	....	....	....	....	....	19
Totals	305	465	642	686	745	969	1,019	1,150	1,178	1,268	1,481	1,547

*Until 1896, graduate students have been included in the first three classes.

REPORT OF THE LIBRARIAN.

Dr. W. O. Thompson, President Ohio State University:

Dear Sir:—The report on the condition of the University Library for the year ending June 30, 1902, is herewith respectfully submitted.

The number of books recorded on the accesion books of the Library is 44,523. This is an increase of 3,943 over the number reported last year. Of the year's additions 1,595 have been received by purchase, 2,122 by gift and 226 by exchange.

The number of books received by purchase seems small, yet few more could be expected from an annual book fund of only $5,000. The average cost of a book for a University library is over $2.50. This figure would be too high if books for libraries in general were being considered, the average cost of a book for a public library being much less; but public libraries must buy many of the books known as $1.00 or $1.50 books, while a university buys but few of them. With each book costing on the average of $2.50, it is evident that there must be a much larger book fund if the University library is to grow as other university libraries are growing.

The increase by gift during the year has been satisfactory. We have received publications from every state in the Union, from all the departments of the United States Government and from many foreign governments; likewise from societies and educational institutions from all over the world. Of this record we have reason to be proud.

Special attention is called to the continuation of the gifts made to the Siebert Collection of works on German history and the Outhwaite Collection of works on the Civil War. These two collections promise to become features of prominence in the University Library and to add greatly to its value. The books in the Siebert Collection are marked with an engraved book plate which carries the German eagle. Two hundred dollars have been given during the year for these books, one hundred of which remains to be expended. The books in the Outhwaite Collection are marked with a book plate engraved by J. W. Spenceley. Mr. Outhwaite has transferred to this collection all the books treating of the Civil War which were formerly in the library. The following is his letter to the Board of Trustees:

"Columbus, Ohio, November 8, 1901.

To the Board of Trustees, Ohio State University:

Gentlemen:—

In looking over the catalogue of the library I find that there are already several works relating to the history of the Civil War. In my judgment there should not be two collections of such works. In order to have them all together I would respectfully propose, that if your board will direct such works on the civil war as may be selected from the general library by a committe to consist of Professor nKight and Miss Jones the librarian, to be transferred to the Outhwaite collection of works on the civil war, I will pay to the trustees the sum of one hundred dollars to be used in the purchase for the library of other works on American history not to be included in the collection under my name.

Very respectfully yours,

(Signed), Jos. H. Outhwaite,

This offer was gladly accepted and the books treating of the civil war which had belonged to the library were marked with the book plate of the Outhwaite Collection and were placed with that collection. The money given by Mr. Outhwaite has been expended for books in other lines of American history. Since that time Mr. Outhwaite has sent other books to the library specially purchased for his collection. On March 31st Mr. Outhwaite sent another letter to the University, as follows:

"Captain Alexis Cope, Secretary O. S. U., Columbus, Ohio:

Dear Sir:—

As the librarian of the University often sees in catalogues of the sale of books sent her, works which ought to be in the collection of works on the Civil War, and there is not time or opportunity to call my attention to the case, I wish to place in the hands of the Trustees, a small sum to be used in such emergencies. Enclosed you will find my check for $25.00 to be used in buying books under the above named circumstances, when the purchase thereof is approved by the librarian and Professor Knight. I, at present, expect to send the same amount for this purpose each year.

(Signed), Jos. H. Outhwithe.

No purchase has yet been made from this fund.

By exchange there have been added to the library 226 bound volumes and a large unmber of pamphlets. Exchanges of special importance have been made with the Boston Public Library, the Allegheny Observatory, the University of Michigan, the University of Oregon and the New York State Library. The Library has been fortunate in collecting many of the old publications of the University which has been used in exchange.

The following are the University publications most needed for this purpose:

I. Reports and catalogues, bound together.
   1-6, 8, 13, 16-19.

II. Catalogues, issued separately.
   1895-6.

III. Bulletins.
   Series 1.—Nos. 1, 2, 3, 4, 5, 7, 8, 9, 10, 11, 12, 13, 14.
   Series 2.—Nos. 2, 3, 4, 5, 6, 7, 8, 9.
   Series 3.—Nos. 1, 3, 4, 5, 9, 10, 11.
   Series 4.—Nos. 2, 4, 5, 8, 9, 11.
   Series 5.—Nos. 5, 7, 8, 16, 20, 21.
   Series 6.—No. 14.
   Of these the following numbers are lacking from the University reserve sets:
   Series 1.—No. 3.
   Series 2.—Nos. 8, 9.
   Series 4.—Nos. 2, 11.

IV. All folders and unnumbered circulars.

Some time ago it was decided to give the University the benefit of the Smithsonian system of foreign exchanges. Four hundred copies each of the thirtieth and thirty-first annual reports were addressed to that number of learned societies and institutions in foreign countries and forwarded to the Smithsonian Institution, which in turn sent them abroad, with no charge to the University excepting the freight to Washington. Thus far, fifty learned societies and institutions have responded favorably and a permanent exchange has been

instituted with them. Three have declined to exchange on the ground that our field of activity is so very different from theirs, and consequently our publications have no value for them. The others have not responded, but will probably do so in time.

All the work connected with the exchange requires constant and accurate attention. A debit and credit account is kept with each institution, on which account is marked every item received and every item sent, together with the time of receipt and the time of sending.

For a number of years the Library has been endeavoring to complete its files of Experiment Station Bulletins. Material printed in pamphlet or folder form, even when distributed in large quantities, becomes in a short time difficult to obtain, and the Library has not yet secured all of these Bulletins. Good progress, however, is being made in the work.

Professor Kellerman, of the University, has this month presented to the Library a large number of Experiment Station Bulletins and Reports. The majority of these duplicate those already in the Library, and the duplicates will be kept in Townshend Hall.

In previous reports there has been much said concerning our set of Congressional documents. Considering the fact that the University has not been a depository, it is remarkable that we have been able to gather together a set which lacks only 209 numbers. Attached to this report is a list of these lacking numbers. This success has been due to the great interest, first, of President McKinley, and second, of Mr. L. C. Ferrell, Superintendent of Documents, interest which was called to this special need of the University Library by Captain Alexis Cope, Secretary of the University.

Another step has now to be recorded. We have this year been made a regular depository for Government documents. This has been accomplished through the cordial interest of Mr. N. D. C. Hodges, Librarian of the Public Library of Cincinnati, and at the instance of the Hon. Jacob H. Bromwell, who designated the Ohio State University as a depository to take the place of the Library at Wyoming, Ohio. To all friends of the University this has brought the greatest satisfaction.

The collection in the Library of programmes, invitations and announcements, issued in connection with University functions, is a most interesting one. At present this material is in excellent shape for consultation. Each piece is mounted on a manila sheet which is punched to fit a common-sense binder (8¼ by 10¾), and these sheets are arranged in chronological order, the years being separated by sheets of scarlet paper. The year begins with the programme of the first function of the college year, whether that be athletic, literary or musical, and ends with the programme of the commencement luncheon. These programmes now fill four binders. Naturally, there are many programmes lacking in the early years. Thus the years 1877 to 1889 fill only one binder, while the remaining years take three. The old programmes are, however, gradually coming in. Just this month two have been received from Mr. Paul Jones, these being the Alumni Call of June 23, 1885, and the programme of the second annual exercises of Horton Literary Society on June 20, 1881.

It is the intention to have a binder given up entirely to proceedings and programmes of alumni associations.

INTER-LIBRARY LOANS.

Grateful acknowledgment is made to the following institutions for their courtesy in lending books to the University during the year: Adelbert College

Library, Cincinnati Public Library, Cleveland Public Library, Missouri Botanical Garden, Oberlin College Library, and the Library of the Surgeon-General's office.

BUILDING.

Early in the year I submitted a report stating the reasons why I was not at that time urging the erection of a library building. Several of the reasons set forth applied only to this year, but one still applies and will apply until the condition of our book fund is changed. In this report I said: "The greatest need of the Library is books. From every department comes the crying demand for money for books. Such being the case, it has seemed almost wrong to ask for money for bricks." This argument gains strength as the time goes by, and there is felt the constant and growing need for books in all the departments of University work. Our Library is a well-selected one. Its quality is good, but in quantity it is far from being what it ought to be. This being the condition, the book collection should at least be doubled before a building is erected, otherwise there could deservedly be brought upon the University the reproach that it is looking only to externals.

In former reports I have earnestly urged the necessity of a Library building. In those same reports I have as earnestly stated the need for books. This report simply emphasizes the fact that the books should come before the building.

LIBRARY TRAINING.

In response to constant demands, instruction in library economy has been given during the last few years in the University Library. At the present time the best library schools require a course of two years of pofessional study before giv'ng the degree of Bachelor of Library Science (B. L. S.). This it was evidently impossible to attempt in the University Library, the staff not being large enough to supply a sufficient teaching force; accordingly there was given instruction in only one subject at a time. Each person wishing to take up the work was told that no attempt would be made to cover in two years' time all the studies included in a professional library course, but at the rate at which the instruction was being given, the whole course could not be covered in less than four or five years' time. No one was allowed to take up the work who was not enrolled as a student in the University. This rule, although keeping many from taking the work, was a necessary one, since by it all questions of fees were avoided and the work was kept a strictly University matter. No University credit was given for the work, however, the subjects embraced in the term "library economy" not yet having been included in the recognized courses of the University.

The facilities of the Library have been such that only a limited number of students could be admitted at any one time, the largest number being six, which number it was found necessary to reduce to four the next year. The majority of those studying in the Library have enrolled as students in the University simply for the sake of being privileged to work in the Library. A number of our own graduates entered as post-graduate students with the same purpose. In addition to the hours given to instruction and to the preparation of the work assigned, each person gave from five to ten hours a week of student work in the Library. This work has been satisfactory in so far as it went, and although no effort was made to equip the students for library positions, some are holding very good positions.

The demand for this work continues, but this spring it was decided not to carry it next year. There are two reasons for coming to this conclusion: (1) The

work received no official recognition from the University, and students taking it could receive no certificate bearing the stamp of the University's approval. This necessarily detracted from the commercial value of the work. (2) It was found that, since no credit was given for the work, it was hard to demand as much time in its preparation as was necessary, and as could be demanded in other courses in the University which did give credit counting towards a degree. This detracted from the educational value of the work.

The work will not be taken up again until these two objections are removed and the University is ready to admit library science as one of its regular departments. As has been said, the demand for the work continues, requests for instruction coming in all the time and from all quarters.

STAFF.

There have been several changes in the Library staff within the last year.

Miss Lucy Allen, who had been connected with the Library for four years, and who had given excellent assistance in the reference work, resigned at the close of last year. She was married on June 25, 1901, to Mr. George Smart, now of Cleveland. Her place was taken by Mr. Frank A. Bohn. Mr. Bohn had had charge of the Library in the evening during the previous year while he was enrolled as a graduate student in the University. In that way he had gained experience and had shown his special adaptation to the work. During the summer of 1901 he studied technical library work in the University of Wisconsin. There are said to be "four factors in the making of a good modern librarian; natual qualifications, general education, professional training and experience." The first two are the essentials for success in reference work, and in them Mr. Bohn has been especially strong. As an instructor in the use of books he has done excellent work.

At the request of the Librarian, the Board of Trustees at the close of last year created the position of Library Fellow. It was understood that this position would be given to a graduate student who would assist in the reference work, but would not be expected to carry any other library work. The position was given to Mr. C. B. Sayre, who resigned the first of February to accept a position in Cincinnati. There was no graduate student who could finish out the year and the place was given to Mr. C. C. Eckhardt of the Senior class. His work was so satisfactory that he has been recommended for the position for next year.

A new position, that of Library stenographer, was created by the Board of Trustees at the close of last year. The Library was most fortunate in securing for this position Miss Elizabeth H. Smythe, who brought to her work library training and library experience, in connection with training in office work. These qualifications, together with her "library spirit," have made her an admirable assistant.

LIBRARY COUNCIL.

The Library Council suffered with the whole University in the death of Professor C. N. Brown. As a member of the Council he had always brought to it keen interest and wise judgment. He had been a member of the Council under its old organization, and when his election as Dean of the Engineering College made him again a member, he took up the work with the same zeal. He was one to be depended upon.

Very respectfully,

(Signed.) OLIVE JONES, *Librarian.*

APPENDIX.

U. S. Congressional Documents (15th to 53rd Congresses) wanted by Ohio State University Library.

Congress.	Session.	Documents.	Volume.	Serial Number.
15th	1st	Senate Documents	1	2
15th	1st	Senate Documents	2	3
15th	1st	House Documents	1	5
15th	1st	House Documents	4	8
15th	1st	House Documents	6	10
15th	2nd	House Documents	6	22
16th	1st	House Documents	2	32
16th	1st	House Documents	3	33
16th	1st	House Documents	4	34
16th	1st	House Documents	8	38
16th	2nd	Senate Documents	4	45
17th	1st	House Documents	2	64
17th	1st	House Documents	3	65–1
17th	1st	House Documents	6	66
17th	2nd	Senate Documents	2	74
17th	2nd	House Documents	1	76
17th	2nd	Index to House Documents and reports, 15th-18thCon.		85–2
18th	1st	Senate Documents	1	89
18th	1st	Senate Documents	2	90
18th	1st	Senate Documents	3	91
18th	1st	House Documents	1	93
18th	1st	House Documents	2	94
18th	1st	House Documents	5	97
18th	1st	House Documents	7	99
18th	1st	House Documents	9	101
18th	1st	House Documents	12	104
18th	1st	House Reports	1	105
18th	2nd	Senate Documents	1	108
18th	2nd	Senate Documents	2	109
18th	2nd	Senate Documents	3	110
18th	2nd	House Journal	.....	112
18th	2nd	House Documents	4	116
18th	2nd	House Documents	5	117
18th	2nd	House Documents	6	118
18th	2nd	House Reports	1	122
18th	2nd	House Reports	2	123
19th	1st	Senate Documents	1	125
19th	1st	Senate Documents	2	126
19th	1st	Senate Documents	3	127
19th	1st	Senate Documents	5	129
19th	1st	House Journal	.....	130
19th	1st	House Documents	1	131
19th	1st	House Documents	4	134
19th	1st	House Documents	6	136
19th	1st	House Documents	7	137

APPENDIX—Continued.

Congress.	Session.	Documents.	Volume.	Serial Number.
19th	1st	House Documents	8	138
19th	1st	House Documents	9	139
19th	1st	House Documents	10	140
19th	1st	House Reports	1	141
19th	1st	House Reports	2	142
19th	2nd	House Documents	6	153
20th	1st	Senate Documents	1	163
20th	1st	Senate Documents	2	164
20th	1st	Senate Documents	3	165
20th	1st	Senate Documents	4	166
20th	1st	Senate Documents	5	167
20th	1st	House Documents	1	169
20th	1st	House Documents	2	170
20th	1st	House Documents	3	171
20th	1st	House Documents	4	172
20th	1st	House Documents	5	173
20th	1st	House Documents	6	174
20th	1st	House Documents	7	175
20th	1st	House Reports	1	176
20th	1st	House Reports	2	177
20th	1st	House Reports	3	178
20th	1st	House Reports	4	179
20th	2nd	Senate Documents	1	181
20th	2nd	Senate Documents	2	182
20th	2nd	House Journal	.....	183
20th	2nd	House Documents	1	184
20th	2nd	House Documents	2	185
20th	2nd	House Documents	3	186
20th	2nd	House Documents	5	188
20th	2nd	House Documents	6	189
20th	2nd	House Reports	.....	190
21st	1st	Senate Journal	.....	191
21st	1st	Senate Documents	1	192
21st	1st	Senate Documents	2	193
21st	1st	House Journal	.....	194
21st	1st	House Documents	2	196
21st	1st	House Documents	3	197
21st	1st	House Documents	4	198
21st	1st	House Reports	2	200
21st	1st	House Reports	3	201
21st	2nd	Senate Documents	1	203
21st	2nd	House Documents	3	208
21st	2nd	House Documents	5	209–2
.....	.....	Index to House Documents and Reports, 18th21st Congresses, 1823-31	.....	.....
21st	2nd	House Reports	.....	210
22nd	1st	Senate Documents	1	212
22nd	1st	Senate Documents	2	213
22nd	1st	Senate Documents	3	214
22nd	1st	House Journal	.....	215
22nd	1st	House Documents	2	217
22nd	1st	House Documents	4	219
22nd	1st	House Documents	5	220

APPENDIX—Continued.

Congress.	Session.	Documents.	Volume.	Serial Number.
22nd	1st	House Documents	6	221
22nd	1st	House Reports	3	226
22nd	1st	House Reports	4	227
22nd	1st	House Reports	5	228
22nd	2nd	House Documents	1	233
22nd	2nd	House Documents	2	234
22nd	2nd	House Documents	3	235
23rd	1st	Senate Documents	15	252
25th	1st	Senate Journal	.....	308
25th	1st	House Documents	2	312
28th	2nd	Senate Documents	6a	455
32nd	1st	Senate Executive Documents	11a	623
33rd	2nd	Senate Executive Documents	14.1	769
33rd	2nd	Senate Executive Documents	14.1	769
33rd	2nd	Senate Executive Documents	14.2	770
33rd	2nd	House Executive Documents	12.1	802
34th	1st	Senate Executive Documents	10	819
34th	1st	Senate Executive Documents	12	821
34th	1st	Senate Executive Documents	13	822
34th	1st	Senate Executive Documents	15	824
34th	1st	Senate Executive Documents	17	826
34th	1st	Senate Executive Documents	18	827
34th	1st	Senate Executive Documents	20.3	834
34th	1st	House Executive Documents	1.3	842
34th	1st	House Executive Documents	1.4	843
34th	1st	House Executive Documents	3	845
34th	1st	House Executive Documents	9	853
34th	1st	House Executive Documents	12	859
34th	1st	House Executive Documents	13	860
34th	1st	House Executive Documents	14.3	863
34th	1st	House Miscellaneous Documents	1	866
34th	1st	House Reports	3	870
34th	3rd	House Executive Documents	1.4	895
34th	3rd	House Miscellaneous Documents	.....	911–2
.....	.....	Senate List of Private Claims, 14th-33rd Cong.	.....	.....
35th	1st	Court of Claims Report	1	970
35th	1st	Court of Claims Report	3	972
35th	2nd	Senate Executive Documents	6	980
37th	3rd	House Executive Documents	13	1170
40th	3rd	House Executive Documents	1.1	1364
40th	3rd	House Executive Documents	1.2	1365
41st	2nd	Senate Report	.....	1409
41st	2nd	House Executive Documents	8	1419
41st	3rd	House Executive Documents	11	1459
42nd	1st	Senate Journal	.....	1465
42nd	2nd	Senate Executive Documents	1	1478
42nd	2nd	Senate Reports	2.1	1484
42nd	2nd	Senate Reports	2.2	1485
42nd	2nd	Senate Reports	2.3	1486
42nd	2nd	Senate Reports	2.10	1493
42nd	2nd	Senate Reports	2.12	1495
42nd	2nd	House Executive Documents	15	1520
42nd	2nd	House Reports	4	1543

APPENDIX—Continued.

Congress.	Session.	Documents.	Volume.	Serial Number.
42nd	3rd	Senate Miscellaneous Documents	1	1546
42nd	3rd	Senate Reports	1	1548
42nd	3rd	House Executive Documents	12	1570
43rd	1st	Senate Executive Documents	3	1582
43rd	1st	Senate Reports	1	1586
43rd	2nd	Senate Executive Documents	.....	1629
44th	2nd	Senate Miscellaneous Documents	2	1723
44th	2nd	Senate Miscellaneous Documents	3	1724
44th	2nd	Senate Miscellaneous Documents	4	1725
44th	2nd	Senate Reports	3	1734
44th	2nd	Senate Reports	4.3	1737
44th	2nd	House Executive Documents	2.6	1747
44th	2nd	House Executive Documents	4.2	1750
44th	2nd	House Executive Documents	5	1751
44th	2nd	House Executive Documents	12	1759
44th	2nd	House Executive Documents	13.1	1760
44th	2nd	House Executive Documents	13.2	1761
45th	2nd	House Executive Documents	22	1814
45th	3rd	Senate Executive Documents	2	1829
46th	2nd	Senate Executive Documents	8	1889–I
.....	.....	Art and Industry, pt. 2	.....	.....
46th	3rd	Senate Executive Documents	1	1941
47th	1st	Senate Executive Documents	2	1987
47th	1st	Senate Miscellaneous Documents	1	1993
47th	1st	Senate Miscellaneous Documents	6	1998
47th	1st	Senate Miscellaneous Documents	10	2002
47th	1st	Senate Miscellaneous Documents	11	2003
47th	1st	Senate Reports	1	2004
47th	1st	Senate Reports	3	2006
47th	2nd	Senate Executive Documents	3	2076
47th	2nd	Senate Miscellaneous Documents	1	2083
47th	2nd	Senate Miscellaneous Documents	3	2085
47th	2nd	Senate Reports	1	2087
47th	2nd	Senate Reports	2	2088
48th	1st	Senate Executive Documents	4	2165
48th	1st	House Miscellaneous Documents	26	2238
48th	1st	House Miscellaneous Documents	29	2241
49th	1st	Senate Miscellaneous Documents	9	2350
49th	1st	Senate Miscellaneous Documents	10	2351
49th	1st	Senate Miscellaneous Documents	11	2352
51st	1st	Senate Reports	10	2712
51st	2nd	Senate Reports	1	2826
52nd	1st	Senate Miscellaneous Documents	1	2903
52nd	1st	Senate Miscellaneous Documents	3	2905
52nd	1st	House Executive Documents	21	2941
52nd	1st	House Miscellaneous Documents	50.8	3019
52nd	1st	House Miscellaneous Documents	50.18	3036
52nd	1st	House Miscellaneous Documents	50.19	3037
52nd	2nd	Senate Executive Documents	5	3059
52nd	2nd	Senate Miscellaneous Documents	8	3071
52nd	2nd	House Executive Documents	4	3079
52nd	2nd	House Executive Documents	5	3080
52nd	2nd	House Executive Documents	6	3081

APPENDIX—Concluded.

Congress.	Session.	Documents.	Volume.	Serial Number.
52nd	2nd	House Miscellaneous Documents	16	3125
52nd	2nd	House Miscellaneous Documents	30	3139
53rd	1st	House Miscellaneous Documents	1	3151
53rd	1st	House Reports	1	3157
53rd	2nd	Senate Miscellaneous Documents	4	3170
53rd	2nd	Senate Reports	16	3194
53rd	2nd	Senate Reports	17	3195
53rd	2nd	House Miscellaneous Documents	38	3266
53rd	3rd	Senate Journal	.....	3274
53rd	3rd	Senate Miscellaneous Documents	5	3285

REPORT OF THE TREASURER.

COLUMBUS, OHIO, June 30, 1902.

To the HON. O. T. CORSON, *President Board of Trustees of the Ohio State University*:

SIR:—I hand you herewith my annual report for the fiscal year ending June 30, 1902, accompanied by duly receipted vouchers for all disbursements.

Very respectfully,

L. F. KIESEWETTER, *Treasurer.*

STATEMENT I.

Detailed statement of receipts by L. F. Kiesenwetter, treasurer, during fiscal year ending June 20, 1902.

Date.	From whom received	For what purpose	Amount	Total
1901				
July 1	Balance on hand.....			$ 11,306 99
11	Treasurer of United States	From appropriation act of Congress, August 30, 1890		25,000 00
Aug. 5	Auditor of state.....	Requisition No. 49 O. S. U. building levy.		5,794 31
16	C. H. Putman.....	Deed, act Mar. 14, 1889	$ 2 00	
	A. & M. Sonekalb.....	Deed, act Mar. 14, 1889	2 00	
	John L. O'Harra.....	Deed, act Mar. 14, 1889	2 00	
	E. A. Hitchcock.....	Use of steam boiler...	10 00	16 00
Sept. 9	J. H. Tilton.....	Diploma fee	5 00	
	Geo. W. Knight	Rent	975 00	
	Herbert Osborn	Lake laboratory fees..	205 00	
	Auditor of State.....	Requisition No. 50, building levy.....	7,051 05	
	W. W. Jerew.....	Deed, act Mar. 14, 1889	2 00	8,238 05
24	E. E. Harrold.....	Store room cards		1,000 00
Oct. 1	Commrs Sinking Fund.	Int. on endowment....	8,250 00	
	E. E. Harrold.....	Store room cards.....	1,000 00	
	Auditor of State.....	Requisition No. 48, O. S. U. fund	2,169 98	
	Auditor of State.....	Requisition No. 52, building levy	2,405 13	13,825 11
2	Auditor of State.....	Requisition No. 51 building levy	5,812 84	
	W. A. Landacre	Summer fees	7 50	5,820 34
18	Auditor of State.....	Requisition No. 53 state levy	9,414 64	
	Standard U. G. Cable Co	One reel	2 25	
	Nat'l Brick Mfg. Co...	Scholarship fund	250 00	
	Alexis Cope, bursar....	Student's fees	8,000 00	17,666 89
Nov. 8	W. E. Severn, clerk...	Fees at veterinary hospital	21 75	
	C. P. Linhart.....	Money paid for towels	4 21	
	John Siebert.....	Siebert library German history	100 00	
	H. C. Lord.....	Rent	120 00	
	Auditor of State.....	Requisition No. 54, building levy	12,395 86	
	Auditor of State.....	Requisition No. 55, O. S. U. fund	32,162 50	
	Auditor of State.....	Requisition No. 56, O. S. U. fund	18,184 65	62,988 97
23	Commrs Sinking Fund.	Int. on endowment....	5,500 00	
	Alexis Cope, bursar....	Students' fees	6,750 00	
	Wm. McPherson	Rent	72 00	
	J. E. Bender, clerk.....	Fees at vet. clinic....	72 60	12,394 60
Dec. 1	E. E. Harrold.....	Sale store room cards.		500 00
	Ohio National Bank....	Sale of refunding bonds		32,550 00
6	Auditor of State.....	Requisition No. 57, building levy	9,026 56	
	Auditor of State.....	Requisition No. 58, O. S. U. fund.....	18,254 95	27,281 51

STATEMENT I—Continued.

Date.	From whom received	For what purpose	Amount	Total
1901				
16	Auditor of State.....	Requisition No. 59, O. S. U. fund	6,835 49	
	H. C. Lord.....	Rent	30 00	
	C. W. Foulk.....	Customs	13 50	6,878 99
24	Commrs Sinking Fund.	Interest onendowment		3,024 94
1902				
Jan. 10	Auditor of State.....	Requisition No 60, building levy	4,700 29	
	B. F. Thomas.....	Rents	170 00	
	H. C. Lord.....	Rent	30 00	
	J. H. Outhwaite	Books transferred, Outhwaite collection	100 00	
	Wm. McPherson.....	Rents	36 00	
	W. H. Sharp	Electric power	10 86	
	Alma W. Millikin	Deed, act Mar. 14, 1889	2 00	
	Alta W. Horn.....	Deed, act Mar. 14, 1889	2 00	5,051 15
	Margaret W. Spring....	Deed, act Mar. 14, 1889	2 00	
	Philip Moore	Deed, act Mar. 14, 1889	2 00	4 00
24	Commrs Sinking Fund.	Interest on endowment	2,200 00	
	Auditor of State	Requisition No. 61, O. S. U. fund	7,976 49	
	Alexis Cope, bursar...	Students' fees	7,500 00	
	J. E. Bender.....	Fees at vet. clinic.....	162 30	
	Rhoda Merritt	Deed, act Mar. 14, 1889	2 00	17,840 79
Feb. 10	E. E. Harrold.....	Sale store room cards.		700 00
14	Auditor of State.....	Requisition No. 62, building levy	4,090 50	
	Auditor of State	Requisition No. 63, O. S. U. fund	18,296 31	22,386 81
20	Commrs Sinking Fund.	Interest on endowment	2,500 00	
	C. W. Mesloh.....	Rent	54 00	
	B. F. Thomas	Rent	42 50	
	Wm. McPherson	Rent	36 00	
	W. A. Kellerman.....	Hauling by Penn.....	50	
	Nancy A. Nichols.....	Deed, act Mar. 14, 1889	2 00	
	E. E. Harrold	Sale store room cards.	300 00	
	Alexis Cope, bursar...	Students' fees	5,000 00	
	J. E. Bender, clerk.....	Fees at vet. clinic.....	111 95	8,046 95
Mch. 5	Auditor of State	Requisition No. 65, O. S. U. fund	18,296 31	
	J. C. Bender.....	Fees at vet. clinic.....	70 45	
	W. C. McCracken.....	Sale of old iron	15 00	18,381 76
Apr. 2	Commrs Sinking Fund.	Interest on endowment	3,500 00	
	Alexis Cope, bursar....	Students' fees	2,250 00	
	Gunton's Magazine	Return of subscription	2 50	
	Wm. C. McCracken	Sale of brass and copper	25 00	
	H. C. Lord	Rent	60 00	
	J. H. Outhwaite.....	Purchase of books for Outhwaite collection.	25 00	
	Philip Habermann	Deed, act Mar. 14, 1889	2 00	
	J. E. Bender, clerk....	Fees at vet. clinic ...	50 48	5,914 98
22	Auditor of State	Requisition No. 66, O. S. U. fund	18,056 31	
	Wm. McPherson.....	Rent.	108 00	
	C. W. Mesloh.....	Rent.	108 00	
	Geo. B. Kauffman.....	Rent	225 00	
	J. E. Bender	Fees at vet. clinic	99 22	18,596 53

STATEMENT I—Concluded.

Date.	From whom received	For what purpose	Amount	Total
1901				
May 3	E. E. Harrold	Sale store room cards	500 00	
	J. E. Bender	Fees at vet. clinic	67 27	
	C. W. Mesloh	Rent	54 00	
	B. F. Thomas	Rent	85 00	
	Commrs Sinking Fund.	Interest on endowment	2,750 00	3,456 27
7	Auditor of State	Repuisition No. 67, O. S. U. fund	18,041 31	
	Auditor of State	Requisition No. 64, building levy	8,476 36	26,517 67
27	Auditor of State	Requisition No. 68, state levy		6,600 00
31	Hayden-Clinton Nat. Bk.	Sale $10,000 refunding bonds		10,883 00
June 7	Auditor of State	Requisition No. 69, O. S. U. fund	19,096 31	
	Auditor of State	Requisition No. 70, building levy	5,244 15	24,340 46
21	Louis Siebert	Siebert library O.S.U.	100 00	
	Wm. Gifford	Sale Va. mil. land	18 00	
	C. H. Woodruff	Old sink	50	
	H. C. Lord	Rent	60 00	178 50
21	C. P. Linhart	Hand books	25 90	
	W. L. Graves	Rent	312 20	
	Thos. F. Hunt	Freight on trees	2 00	
	H. F. Smith	Senior class asses'mt.	35 00	
	E. E. Harrold	Commencem't luncheon	84 00	
	Wm. McPherson	Rent	72 00	
	Alexis Cope, bursar	Diploma fees	755 00	
	Alexis Cope, bursar	Summer shop fees	455 00	
	Alexis Cope, bursar	Students' fees	8,000 00	9,741 10
30	Commrs Sinking Fund.	Interest on endowment	5,881 07	
	George Seney, Jr.	Diploma fee	5 00	
	O. B. Clark	Summer shop	5 00	
	J. E. Bender, clerk	Vet. hospital fees	213 46	
	E. E. Harrold	Store room cards	760 89	
	E. E. Harrold	Cash sales	214 31	7,079 73
				$420,006 40

STATEMENT II.

Detailed Statement of disbursements by L. F. Kiesewetter, treasurer, during fiscal year ending June 30, 1902.

Date.	To whom paid.	For what purpose.	No.	Amount.
1901				
July 3	Am. Hard Rubber Co...	Rubber	1	$ 4 91
	W. H. Anderson & Co...	Reports	2	11 00
	Am. Microscopical Society	Proceedings	3	2 15
	American Contractor...	Advertisement	4	4 95
	James Bonar & Co.....	Oil pump	5	36 00
	Frank S. Betz & Co.....	Scientific apparatus	6	29 50
	Bausch & Lomb Opt. Co	Camera, etc.	7	53 31
	Chaplin Fulton Mfg. Co.	Regulator and governor...	8	89 10
	Central Electric Co.....	Supplies	9	149 60
	Compressed Air	Proceedings	10	2 00
	Chapman Valve Mfg. Co.	Valves	11	165 48
	Columbia Refining Co..	Oil soap	12	27 36
	Dodd, Mead & Co.....	Year book	13	4 25
	F. S. Earle	Botanical specimens	14	62 57
	Chas. F. Fawcett.....	Campus work	15	12 75
	Ginn & Co.....	Books	16	6 00
	Geological Society of America	Index	17	2 50
	Hohmann & Maurer Mfg. Co.	Thermometers	18	9 00
	Ives Kromskop Co.....	Kromskop	19	85 00
	The Jersey Bulletin....	Herd register	20	2 00
	Journal of Com. and Bulletin	Year book	21	1 25
	Knauth, Nachod & Kuhne	Acct. of Otto Harrasowitz.	22	3 68
	C. J. Krehbiel & Co....	Reprints	23	19 00
	The Lunkenheimer Co..	Governor	24	14 40
	Library Bureau	Supplies	25	87 65
	Manhattan Rubber Mfg. Co.	Packing	26	3 15
	Chas. F. Mason, Bursar	Astronomical telegrams ..	27	2 23
	A. McMichael	Engrossing diplomas	28	28 40
	Benj. D. Nicola.....	Work in library.....	29	2 10
	J. C. Perry.....	Campus work	30	3 15
	Star Milk Cooler Co....	Dairy apparatus	31	8 45
	Sherwood Mfg. Co.....	Cutters and arms.....	32	12 90
	E. H. Sargent & Co.....	Water bath	33	4 48
	G. E. Stechert	Books	34	204 66
	Edw. Thompson Co.....	Encyclopedia of Law.....	35	6 00
	University of Chicago..	Reprints	36	16 50
	Walworth Mfg. Co.....	Valve	37	15 00
	B. F. White.....	Lantern slides	38	28 25
	Western Kieley Steam Supply Co.	Valve	39	170 00
	J. S. Abbott & Co.....	Yale lock	40	1 25
	Blackwood, Green & Co.	Trough	41	50
	H. Braun Sons & Co...	Sulphur flower	42	6 13
	David C. Beggs & Co....	Pillows and tapestry.....	43	5 81
	Samuel Butler & Co.....	Bear soap	44	4 50
	Z. Brewer	Hay	45	1 80
	Batterson Decorative House	Papering	46	11 95

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1901				
July 3	Alfred R. Barrington..	Commencement music	47	35 00
	Bowden Towel Supply Co.	Towel service	48	2 00
	Berlin Printing Co.....	Printing	49	15 00
	Bucher Engraving Co...	Half-tones, etc.	50	4 90
	Columbus Mill and Mine Supply Co.	Supplies	51	222 38
	Cherington Ptg. and Engraving Co.	Repairing seal	52	1 00
	Central Ohio Paper Co..	Paper	53	8 50
	Geo. D. Cross Lumber Co.	Lumber	54	7 04
	Columbus Citizens' Telephone Co.	Poles	55	20 25
	Columbus Bolt Works..	Nuts	56	4 35
	Columbus Slate Co.....	Slate	57	10 80
	Champlin Printing Co..	Printing	58	106 75
	Capital City Machine Works	Hooks	59	40 00
	Dunn, Taft & Co.....	Muslin	60	1 28
	Columbus Supply Co...	Supplies	61	2 53
	Engelke & Bigelow.....	Freight and cartage	62	25 25
	Erner & Hopkins.....	Cord	63	1 28
	Electric Supply & Construction Co.	Electrical supplies	64	60 83
	A. F. Fenstemaker.....	Painting	65	6 40
	Wm. Frakes	Milk tickets	66	3 30
	Franklin Park Floral Co.	Decorations	67	110 50
	Frankenberg Bros.	Mailing tubes	68	96
	Franklin Toilet Supply Co.	Towel supply	69	42 22
	Green,Joyce & Co.....	Ribbon	70	8 28
	Carl E. Steeb.....	July salary	71	75 00
	P. Hayden Saddlery and Harness Co.....	Cylinder, etc.	72	28 28
	Francis Harris	Papering Mesloh house....	73	11 06
	Chas. T. Howe.....	Commencement music	74	48 00
	N. C. Hager.....	Groceries	75	8 86
	Cass Harkins	Gardner duplex pump....	76	30 00
	Hann & Adair.....	Labels, cards and blanks..	77	16 40
	C. G. Jahn.....	Law books	78	50 00
	Jones Nat'l Fence Co...	Wire fence	79	9 00
	R. R. Johnston.....	Commencement luncheon .	80	287 00
	Kauffman-Lattimer Co.	Chemical supplies	81	55 47
	Kelton & Converse.....	Lumber	82	59 90
	M. V. Mitchell & Son...	Marble panels	83	12 50
	C. E. Morris & Co.....	Angles and T bars.....	84	4 00
	Murray City Coal Co..	Pea coal	85	144 04
	Monypeny-Hammond Co.	Matches, etc.	86	5 20
	W. H. Miller Co.....	Rubber gaskets	87	16 32
	Miller & Beck.....	Repairing roof	88	8 83
	J. S. Maclean.....	Lumber	89	50 85
	McClelland & Co.....	Stationery and book	90	7 75
	W. H. H. Nash.....	Book	91	3 00
	Nitschke Bros.	Herbarium stationery and paper	92	31 25
	Ohio Furniture Co.....	Couch and chair	93	15 50

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1901				
July 3	Chas. J. Palmer	Oil filter, cans, etc.	94	13 52
	James Penn	Hauling	95	22 02
	Payne-McDonald Hardware Co.	Hardware and tools	96	58 56
	Pennsylvania Fuel Co.	Nut coal	97	5 69
	Ridenour & Honline	Letter files	98	1 25
	Ruggles-Gale Co.	Shelf boxes	99	5 00
	Seraphim Blank Book Co.	Binding	100	62 90
	Shilling Foundry Co.	Castings	101	3 43
	Standard Oil Co.	Oils	102	35 40
	Schoedinger, Fearn & Co.	Sash weights and hammer	103	2 17
	Spahr & Glenn	Circulars, cards, etc.	104	38 25
	Tracy, Wells & Co.	Mops, etc.	105	7 80
	Taylor, Williams & Co.	Coal	106	29 94
	Tallmadge Hard'are Co.	Hardware	107	2 95.
	J. M. & W. Westwater.	Dishes and tableware	108	35 48
	C. F. Bahrke	Repairing switch board	109	1 05
	C. H. Clevenger	Labor, 108 hrs. at 12½c.	110	13 50
	W. E. Cook	Labor, 221¼ hrs. at 13½c.	111	29 86
	W. H. Case	Labor 13 days firing at $1.50	112	19 50
	R. D. De Wolf	Labor, 42 hrs. at 20c.	113	8 40
	Ernst A. Eggers	Lantern	114	4 00
	T. R. Evans	Machinist, 118 hrs. at 27½c	115	32 45
	Grace Eagleson	83¾ hrs. work at 20c.	116	16 75
	Thos. E. French	Engrossing commissions	117	5 40
	F. E. Fleischer	149½ hrs. work at 13½c.	118	20 11
	L. W. Funk	254 hrs. work at 15c.	119	38 10
	R. W. Funk	230½ hrs. work at 15c.	120	34 58
	J. W. Gwynn	48 hrs. work at 15c.	121	7 20
	Arthur Geren	37 hrs. work at 12½c and cloth $1.70	122	6 33
	Laurel L. Hill	Clerical services	123	15 00
	Mabel Huddleson	52 hrs. work in library	124	6 50
	D. L. Hurst	187 hrs. work at 12½c.	125	23 43
	Edith R. Hubler	Type writing	126	1 00
	A. D. Harrington	24 hrs. work at 25c.	127	6 00
	W. A. Kellerman	Postage, etc.	128	4 48
	D. L. Keagy	120 hrs. work at 12½c.	129	15 00
	H. G. Knoderer	39 hrs. work at 15c.	130	5 85
	Geo. W. Knight	Type writing and ribbon	131	5 75
	Jessie Karns	Stenographic work	132	51 25
	Philip Long	Ice and milk	133	1 72
	J. Paul Long	36 hrs. work at 12½c.	134	4 50
	H. M. McFarland	43 hrs. cleaning apparatus at 12½c.	135	5 38
	E. R. Minns	37½hrs. work at 12½c.	136	4 69
	Adah L. Meyers	96 hrs. mounting specimens at 12½c	137	12 00
	Max W. Morse	68 hrs. mounting specimens at 15c.	138	10 00
	Wilbert Morelan	38 hrs. carpenter work at 35c.	139	13 30
	H. C. Nidy	18 hrs. work at 15c.	140	4 50
	Bertha Paterson	38½ hrs. work at 15c.	141	5 78
	Frank J. Prince	54 hrs assistance in chemical laboratory	142	8 10

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1901				
July 3	Calvin B. Ross	6 hrs. work at 15c.	143	90
	J. H. Randall	30 hrs. carpenter work at 35c.	144	10 50
	The Lantern	Advertising	145	58 34
	C. F. Schlochtermeyer	18½ hrs. work at 15c.	146	2 75
	Mason Snow	56 hrs. work in law library at 10c	147	5 60
	J. W. Shaw	48 hrs. work in law library at 10c.	148	4 80
	W. C. Smith	16 hrs. work in law library at 10c.	149	1 60
	Mae Schaff	30½ hrs. work in law library at 12½c.	150	3 81
	B. F. Thomas	Expense visiting high school	151	5 90
	C. S. Van Dyke	Services as Fellow 12½ mo	152	15 00
	F. E. Wynne	12⅔ hrs. work at 15c.	153	1 85
	F. M. Weber	71½ hrs. work at 15c.	154	10 72
	F. R. West	Books	155	57 93
	James Whetzel	15 hrs. work at 12½c.	156	1 87
	S. E. Ward	21 hrs. drawing at 15c.	157	3 15
	Alice C. Wilson	115 hrs. mounting botanical specimens at 12½c.	158	14 37
	C. H. Young	30 hrs. work at 15c.	159	4 50
	Robert Cunningham	99 hrs. services as guide at 12½c.	160	12 38
9	R. M. Rownd, P. M.	2,000 stamped envelopes	161	42 40
	F. C. Caldwell	Belt, cement, etc.	162	4 93
10	John T. Mack	Expenses at meeting June 17, 1901	163	17 64
11	U. S. Telephone Co.	Long distance messages	164	1 00
12	Helen Powell	90¼ hrs. in reg. office at 20c.	165	18 05
13	W. L. Davies	Summer field work, C. E.	166	50 00
15	Charles S. M. Krumm	Taking acknowledgment—11 deeds	167	2 75
	C. E. Sherman	Salary summer school civil engineering	168	120 00
	Mrs. Amelia Ehring	9 days janitor work in library	169	9 00
	C. B. Young	Cleaning bow instruments	170	2 50
	Hann & Adair	Add'l allowance on bill of Jan., 25. 1901	171	30 21
17	Katharine Duncan	July salary	172	58 33
18	W. O. Thompson	July salary	173	416 67
27	Edith D. Cockins	July salary	174	60 00
24	Alexis Cope	July salary	175	187 50
27	W. C. McCracken	July salary	176	150 00
25	Edith R. Hubler	July salary	177	33 34
27	Chas. Hicks	July salary	178	45 00
	Ray Barton	July salary	179	20 00
	G. A. Goodspeed	July salary	180	40 00
	John H. Brown	July salary	181	25 00
	John H. Brown	July salary	182	15 00
	C. N. Brown	July salary	183	225 00
	D. D. Geren	July salary	184	40 00
	H. Chantler	July salary	185	40 00
	W. Townsell	July slary	186	25 00

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1901				
July 27	G. C. Denny	July salary	187	40 00
	M. N. Cook	July salary	188	40 00
	H. M. Templin	July salary	189	40 00
	Wm. Standley	July salary	190	58 33
	Benj. LeBay	July salary	191	50 00
	Geo. R. Rose	July salary	192	70 00
	Frank Ruhlen	July salary	193	75 00
	O. E. Jennings	July salary	194	45 00
	F. J. Tyler	July salary	195	25 00
	E. E. Harrold	July salary	196	85 00
	J. P. Covan	July salary	197	80 00
	V. H. Davis	July salary	198	62 50
	A. F. Hall	July salary	199	66 66
	John Ricketts	July salary	200	45 00
	T. E. Osburn	July salary	201	45 00
	W. C. Mills	July salary	202	40 00
	James Kelley	July salary	203	30 00
	Dan. E. Ball	July salary	204	20 00
	W. Whitestine	July salary	205	40 00
	R. M. Rownd, P. M.	Postage 2d class matter	206	20 00
	Earl Kimmel	July salary	207	20 00
	Laurel Hill	Services as stenographer, July, 1901	208	33 33
	C. H. Woodruff	July salary	209	65 00
29	Columbus Citizens' Telephone Co.	Service from July 1 to September 30, 1901	210	90 00
Aug. 1	D. M. Massie	Exp. as trustee from Jan. 1 to July 1, 1901	211	30 33
5	R. W. Funk	Labor in store room	212	45 00
	Columbus Gas Co.	June and July gas	213	202 81
	Alexis Cope	August salary	214	187 50
	Thos. J. Godfrey	Expenses as trustee	215	25 40
6	L. B. Wing	Expenses as trustee	216	5 15
8	Thos. Boude	Labor	217	34 12
	C. N. Brown	Expenses	218	43 78
	Geo. R. Bott	Student labor	219	5 68
	W. E. Cook	Labor on campus	220	18 22
	R. H. Cunningham	Guide service	221	21 35
	Frank Cavin	Student labor	222	46 03
	Wm. O. Cappell	Carpenter work	223	25 20
	W. H. Case	Labor	224	53 00
	F. C. Caldwell	Money advanced	225	23 35
	Harry Covan	Labor	226	20 00
	R. D. De Wolf	Student labor	227	3 40
	T. R. Evans	Machinist labor	228	77 55
	Paul Fischer	Veterinary supplies	229	8 79
	Thos. E. French	Engrossing diplomas	230	11 40
	F. E. Fleischer	Campus work	231	19 11
	D. D. Geren	Janitor work	232	6 00
	W. D. Griffith	Campus work	233	11 85
	A. F. Hall	Machinist	234	20 40
	H. G. Knoderer	Student labor	235	7 65
	M. B. Lamb	Veterinary supplies	236	2 90
	J. Paul Long	Student labor	237	22 75
	R. E. McIntosh	Student labor	238	63 50
	Adah L. Meyers	Mounting specimens	239	6 00
	Wilbert Morelan	Carpenter work	240	79 10

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1901				
Aug. 8	Edward Orton	Money advanced	241	31 18
	Marion Peck	Labor	242	45 50
	J. H. Randall	Carpenter work	243	61 95
	W. H. Scott	Money advanced	244	1 60
	F. R. West	Books	245	8 78
	Alice C. Wilson	Mounting specimens	246	5 75
	American Bridge Co.	Bolts and plates	247	11 00
	American District Telegraph Co.	Night watch boxes	248	84 00
7	F. C. Caldwell	Petty cash items	249	4 61
8	Buckeye Brass Foundry.	Castings	250	1 05
	The W. C. Benbow Co.	Arc lamps and globes	251	58 50
	Blackwood, Green & Co.	Tin and labor	252	3 33
	Berlin Printing Co.	Printing	253	25 75
	George Feick	Est. No. 1, extra foundation, law building	254	3,212 61
	George Feick	Est. No. 1, law building	255	2,581 70
	Borger Bros. & Co.	Grate bars	256	19 74
	Wm. Burdell, Jr.	Harness supplies	257	10 20
	H. Braun Sons & Co.	Supplies	258	9 85
	Bowden Towel Supply Co.	Towel supply	259	4 25
	Capital City Laundry.	Towel service	260	62
	Geo. D. Cross Lumber Co.	Lumber	261	292 81
	The H. Cole Co.	Cloth and paper	262	1 47
	Columbus Plate & Window Glass Co.	Glass	263	5 65
	Capital City Machine Works	Rods and plates	264	18 15
	Columbus Mill and Mine Supply Co.	Supplies	265	94 53
	Champlin Printing Co.	Printing	266	16 25
	Columbus Suplpy Co.	Supplies	267	145 91
	W. J. Davidson	Corn	268	27 50
	E. Doddington & Co.	Lumber	269	53 80
	Engelke & Bigelow	Freight and cartage	270	31 32
	Electric Supply & Construction Co.	Paint and wire	271	16 88
	The Erner-Hopkins Co.	Electrical supplies	272	16 39
	A. F. Fenstemaker Co.	Painting	273	17 30
	The Fish Stone Co.	Ventilating stone	274	6 00
31	Frank Ruhlen	August salary	275	75 00
8	Franklin Toilet Supply Co.	Towel service	276	2 55
	W. H. Grubs	Piano rent	277	5 00
	J. J. Gheen	Plastering	278	141 55
	Chas. B. Hood	Floor brushes	279	13 50
	J. C. Howard	Painting	280	459 50
	Hann & Adair	Printing and supplies	281	6 70
	Jeffrey Mfg. Co.	Rabbetting bearing	282	1 35
	Chas. W. Knorr	Repairing roof	283	24 78
	Kelton & Converse	Lumber	284	147 11
	McAllister, Mohler & Co.	Wernicke units	285	7 75
	Robt. A. McClure	Lumber in tank	286	6 50
	Nitschke Bros.	Printing	287	21 25
	J. S. Maclean	Lumber	288	21 25
	T. J. O'Neil	Rent of canvas	289	5 00

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1901				
Aug. 8	Pneumatic Watchman Check Co.	Dials, keys, etc.	290	2 20
	R. L. Polk & Co.	Columbus Directory	291	5 00
	Pennsylvania Fuel Co.	Coal	292	3 42
	Ben D. Potts	Supplies	293	8 38
	James Penn	Laundry and freight	294	20 75
	Sparks-Seward Co.	Pipe and clay	295	9 90
	Schoedinger, Fearn & Co.	Hardware	296	29 35
	Spahr & Glenn	Printing	297	10 75
	M. P. Street	Masonry	298	647 80
	Wm. L. Taylor Mantel and Grate Co.	Blackboard and frame	299	10 00
	Taylor, Williams & Co.	Coal	300	21 63
	Tallmadge Hardware Co.	Hardware	301	75 28
	C. H. Walcutt	Stone	302	23 40
	Amer. Entomological Co.	Insect boxes, etc.	303	83 75
	American Bridge Co.	Beams, bars, etc.	304	16 37
	L. P. Bailey	Advertisement	305	5 00
	Bourne & Knowles Mfg. Co.	Gaskets	306	19 21
	Bausch & Lomb Opt. Co.	Supplies	307	121 10
	J. Carbutt	Plates	308	81 71
	J. F. Donahue & Co.	Hardware	309	9 95
	M. Abbott Frazar	Klaegor black	310	1 05
	J. F. Gepfert	Proceedings	311	8 00
	Gowing & Co.	Calorimeter and thermometer	312	32 00
	Gardner Governor Co.	Governor and valve	313	21 50
	Henry T. Goebel	Kitchen tables	314	20 00
	Seth Hayes	Student labor	315	11 20
	W. C. Heller & Co.	Steel boxes	316	10 14
	Jarecki Mfg. Co.	Supplies	317	125 65
	Max W. Morse	Janitor service	318	10 00
	Carl L. Osberg	Plates	319	4 60
	Jos. T. Ryerson & Son.	Steel plates	320	3 15
	Strong, Carlisle & Hammond Co.	Water controller	321	100 00
	Schaffer & Budenberg.	Tachometers	322	102 60
	Standard Underground Cable Co.	Wire cable	323	26 73
	L. S. Starrett Co.	Supplies	324	9 75
	Sherwood Mfg. Co.	Shaft and cleaver	325	36 00
	Westinghouse Elec. & Mfg. Co.	Arresters	326	17 50
	Webb Stationery & Ptg. Co.	Orders and supplies	327	20 15
	The Winkley Co.	Oil hole covers	328	1 19
	West. Kieley Steam Spec. Co.	Governor and valves	329	125 50
	R. M. Rownd, P. M.	Postage stamps	330	10 00
10	W. Stillman Dutton	Services as architect, lawbuilding	331	225 17
8	Chas. J. Cruse	Pens	332	4 50
31	W. C. Mills	August salary	333	40 00
	F. J. Tyler	August salary	334	25 00
	O. E. Jennings	August salary	335	45 00
	E. E. Harrold	August salary	336	85 00

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1901				
Aug. 31	J. P. Covan	August salary	337	80 00
	V. H. Davis	August salary	338	62 50
	A. F. Hall	August salary	339	66 66
	W. O. Thompson	August salary	340	416 67
	K. H. Duncan	August salary	341	58 33
16	Carl E. Steeb	August salary	342	75 00
31	Edith R. Hubler	August salary	343	33 33
	Edith D. Cockins	August salary	344	60 00
	Wm. C. McCracken	August salary	345	150 00
	Wm. Standley	August salary	346	58 33
	W. H. Case	August salary	347	50 00
	Benj. LeBay	August salary	348	50 00
	Geo. R. Rose	August salary	349	70 00
	Earl Kimmel	August salary	350	20 00
	John Ricketts	August salary	351	45 00
	Thos. E. Osburn	August salary	352	45 00
	James Kelley	August salary	353	30 00
	Chas. M. Hicks	August salary	354	45 00
	Ray Barton	August salary	355	20 00
	G. A. Goodspeed	August salary	356	40 00
	John Brown	August salary	357	25 00
	John Brown	August salary	358	15 00
	D. D. Geren	August salary	359	40 00
	Wm. Whitestine	August salary	360	40 00
	H. Chantler	August salary	361	40 00
	G. C. Denny	August salary	362	40 00
	M. N. Cook	August salary	363	40 00
	H. M. Templin	August salary	364	40 00
17	Alice Smith	Stenographic work, executive office	365	10 00
31	Laurel Hill	Services as stenographer, August, 1901	366	33 33
	W. Townsell	August salary	367	25 00
Sept. 5	W. H. Artrip	Campus work	368	12 25
	J. M. Battenfield	Library work	369	1 63
	Thomas Boude	Labor	370	47 25
	Thos. O. Cappell	Carpenter work	371	72 80
	Frank Cavin	Student labor	372	47 25
	W. E. Cook	Campus work	373	22 27
	J. F. Coe	Campus work	374	60 00
	Robt. H. Cunningham	Guide service	375	21 48
4	W. Stillman Dutton	Architect's fees	376	202 77
5	Otto Eckman	Campus work	377	3 87
	R. Escobar	Library work	378	1 07
	C. L. Fournier	Campus work	379	7 87
	F. E. Fleischer	Campus work	380	27 40
	L. D. Fauver	Guide services	381	2 00
	H. H. Graver	Campus work	382	27 00
	W. D. Griffith	Campus work	383	44 85
	C. B. Hoover	Campus work	384	7 50
	D. L. Hurst	Campus work	385	37 06
	W. F. Hunter	Money advanced	386	5 00
	Edith R. Hubler	Making stencil	387	35
	Geo. W. Knight	Money advanced	388	5 00
	Wm. Kimball	Campus work	389	27 00
	Lewis Lake	Campus work	390	11 87
	Frank Lehman	Campus work	391	4 50
	J. Paul Long	Mounting specimens	392	12 00

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1901				
Sept. 5	Max Morse	Student labor	393	10 00
	John Marting	Campus work	394	13 00
	R. M. Martin	Campus work	395	13 18
	W. Morelan	Carpenter work	396	72 10
	R. E. McIntosh	Wiring	397	67 25
	Edward Orton	Money advanced	398	5 00
4	U. S. Telephone Co.	Toll service	399	40
	Charles Pixler	Labor as tender	400	22 50
5	Marion Peck	Steam fitting	401	47 25
	J. H. Randall	Carpenter work	402	75 60
	Antonio Ribot	Library work	403	1 63
	Henry P. Snow	Campus work	404	9 56
	Mason Snow	Watchman	405	22 50
	Carl E. Steeb	Notary work	406	2 75
	James Weiseman	Campus work	407	13 75
	J. S. Abbott & Co.	Glass	408	1 20
	Acme Paving Co.	Laying floors	409	70 00
	American Bridge Co.	Iron work	410	77 99
	The Benbow Co.	Arc lamp	411	19 50
	Bryson & Son	Repairing chairs	412	17 25
	Samuel Butler & Co.	Gluten meal	413	26 00
	H. Braun Sons & Co.	Red lead	414	30
	Blackwood, Green & Co.	Hardware	415	120 76
	Columbus Mine and Mill Supply Co.	Safety valve	416	1 25
	Cols. Bank Note Co.	Law certificates	417	36 00
	Columbus Carriage and Hardware Co.	Castings	418	4 20
	Capital City Machine Works	Supplies	419	22 87
	The H. Cole Co.	Supplies	420	34 25
	Columbus Supply Co.	Supplies	421	469 66
	Champlin Printing Co.	Printing	422	23 80
	Engelke & Bigelow	Freight and cartage	423	42 93
	Erner & Hopkins	Supplies	424	9 35
	Elect. Supply and Const. Co.	Supplies	425	55 61
	Ferris Steam Mortar Works	Brick mortar	426	5 70
	Fred J. Heer	Printing pamphlets	427	18 75
	P. Hayden Saddlery Hardware Co.	Grate, bars, etc.	428	4 35
	Hann & Adair	Printing	429	20 50
	J. C. Howard	Painting	430	93 70
	Kauffman-Lattimer Co.	Drugs and chemicals	431	128 71
	Krauss, Butler & Benham Co.	Linoleum	432	131 68
	Kelton & Converse	Lumber	433	79 38
	F. Martin	Cleaning carpets	434	3 01
	McClelland & Co.	Silverine pens	435	1 20
	Murray City Coal Co.	Coal	436	65 12
	Nitschke Bros.	Circulars	437	7 50
	R. L. Polk & Co.	Directories	438	10 00
	Chas. J. Palmer	Repairing, etc.	439	58 74
	Ruggles, Gale & Co.	Oosten pens	440	1 50
	Wm. Randolph	Laying stone	441	73 44
	Schroth & Potter	Shades	442	73 20
	Standard Oil Co.	Water White oil	443	4 85

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1901				
Sept. 5	Spahr & Glenn	Reprints	444	12 50
	Smith Prem. Typewriter Co.	Cabinet and ribbon	445	9 75
	M. P. Streett	Masonry	446	366 95
	Tallmadge Hardware Co.	Hardware	447	19 62
	Union Transfer Co.	Pulley	448	4 00
	A. H. Andrews & Co.	Slating and brush	449	9 00
	The Geo. R. Butler Co.	Lumber	450	3 10
	John A. Brashear	Prisms and objective	451	96 50
	Central Electric Co.	Supplies	452	21 50
	J. B. Colt Co.	Condenser, generator, etc.	453	29 50
	Eimer & Amend	Filters, etc.	454	82 52
	Charles Engelhard	Element	455	40 00
	Seth Hayes	Student work	456	1 40
	Indian Alkali Works	Savogran	457	20 28
	Juergens Bros. Co.	Half-tones	458	14 70
	Brohl & Appell	Pipe and repairs	459	93
	H. W. Johns Mfg. Co.	Brush and paint	460	6 70
	The Lunkenheimer Co.	Oil cups, feeds, etc.	461	51 05
	James McCrea & Co.	Joint clamp	462	16 88
	Murphy Iron Works	Bar ribs, etc.	463	265 62
	American Linseed Co.	Oil meal	464	28 50
	Henry Troemner	Weights and repairs	465	54 45
	Whitney Mfg. Co.	Envelopes	466	9 50
	Columbus Gas Co.	August gas	467	76 70
	W. U. Telegraph Co.	Telegrams	468	4 10
	H. Osborn	Sail boat	469	20 00
6	Alexis Cope	September salary	470	187 50
	George Feick	Est. No. 2, law building	471	5,991 46
	George Feick	Est. No. 2, law building, extra foundation	472	1,059 59
9	John Ricketts	Part September salary	473	15 00
28	Thomas F. Hunt	September salary	474	250 00
	W. D. Gibbs	September salary	475	175 00
	John W. Decker	September salary	476	160 00
	Frank Ruhlen	September salary	477	75 00
	H. A. Weber	September salary	478	225 00
	A. E. Vinson	September salary	479	90 00
	Geo. W. Knight	September salary	480	250 00
	T. C. Smith	September salary	481	120 00
	A. H. Tuttle	September salary	482	100 00
	A. M. Bleile	September salary	483	225 00
	C. B. Morrey	September salary	484	120 00
	M. Dresbach	September salary	485	50 00
	W. C. Mills	September salary	486	40 00
	H. C. Lord	September salary	487	225 00
	W. A. Kellerman	September salary	488	225 00
	J. H. Schaffner	September salary	489	120 00
	J.C. Bridwell	September salary	490	25 00
	Elma B. Perry	September salary	491	25 00
	F. J. Tyler	September salary	492	25 00
	O. E. Jennings	September salary	493	45 00
	S. A. Norton	September salary	494	120 00
	Wm. McPherson	September salary	495	225 00
	W. E. Henderson	September salary	496	140 00
	C. W. Foulk	September salary	497	110 00
	C. P. Linville	September salary	498	30 00
	W. L. Dubois	September salary	499	30 00

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1901				
Sept.29	Harry T. Hance	September salary	500	30 00
	C. N. Brown	September salary	501	225 00
	C. E. Sherman	September salary	502	140 00
	W. L. Davies	September salary	503	50 00
	E. E. Harrold	September salary	504	85 00
	R. W. Funk	September salary	505	45 00
	Edward Orton, Jr.	September salary	506	200 00
	A. V. Bleininger	September salary	507	100 00
	Minnie A. Stoner	September salary	508	180 00
	C. P. Souther	September salary	509	120 00
	J. N. Bradford	September salary	510	200 00
	Thomas E. French	September salary	511	120 00
	Thomas K. Lewis	September salary	512	100 00
	Silas Martin	September salary	513	100 00
	J. H. Vosskuehler	September salary	514	100 00
	F. C. Clark	September salary	515	200 00
	J. E. Hagerty	September salary	516	110 00
	F. C. Caldwell	September salary	517	180 00
	F. A. Fish	September salary	518	100 00
	R. D. De Wolf	September salary	519	30 00
	J. P. Covan	September salary	520	80 00
	A. C. Barrows	September salary	521	225 00
	J. R. Taylor	September salary	522	140 00
	W. H. Siebert	September salary	523	160 00
	C. S. Prosser	September salary	524	180 00
	J. A. Bownocker	September salary	525	150 00
	E. A. Eggers	September salary	526	225 00
	C. W. Mesloh	September salary	527	140 00
	B. A. Eisenlohr	September salary	528	80 00
	J. R. Smith	September salary	529	225 00
	A. W. Hodgman	September salary	530	140 00
	W. S. Elden	September salary	531	120 00
	W. R. Lazenby	September salary	532	225 00
	V. H. Davis	September salary	533	62 50
	F. E. Sanborn	September salary	534	200 00
	W. A. Knight	September salary	535	120 00
	W. H. Renck	September salary	536	100 00
	C. P. Crowe	September salary	537	100 00
	S. C. Derby	September salary	538	225 00
	W. F. Hunter	September salary	539	250 00
	J. H. Collins	September salary	540	20 00
	E. B. Kinkead	September salary	541	120 00
	W. H. Page	September salary	542	180 00
	E. O. Randall	September salary	543	70 00
	Olive Jones	September salary	544	135 00
	F. A. Bohn	September salary	545	50 00
	Harriet N. Townshend	September salary	546	55 00
	Gertrude Kellicott	September salary	547	55 50
	Maude Jeffrey	September salary	548	55 00
	C. B. Guittard	September salary	549	55 00
	C. B. Sayre	September salary	550	20 00
	R. D. Bohannon	September salary	551	225 00
	Geo. W. McCoard	September salary	552	160 00
	J. E. Boyd	September salary	553	150 00
	C. L. Arnold	September salary	554	120 00
	H. W. Kuhn	September salary	555	100 00
	S. E. Rasor	September salary	556	90 00
	J. F. Travis	September salary	557	30 00

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1901				
Sept. 28	K. D. Swartzel	September salary	558	120 00
	W. T. Magruder	September salary	559	225 00
	E. A. Hitchcock	September salary	560	175 00
	A. F. Hall	September salary	561	66 66
	N. W. Lord	September salary	562	200 00
	E. E. Somermeier	September salary	563	100 00
	Gustav Bruder	September salary	564	20 00
	F. A. Ray	September salary	565	200 00
	Geo. B. Kauffman	September salary	566	200 00
	C. A. Dye	September salary	567	100 00
	W. H. Scott	September salary	568	225 00
	T. H. Haines	September salary	569	120 00
	A. E. Davies	September salary	570	90 00
	C. P. Linhart	September salary	571	160 00
	Clara M. Berryman	September salary	572	75 00
	D. C. Huddleson	September salary	573	50 00
20	B. F. Thomas	September salary	574	225 00
28	A. D. Cole	September salary	575	190 00
	F. E. Kester	September salary	576	90 00
	H. B. Brooks	September salary	577	25 00
	J. V. Denney	September salary	578	225 00
	W. L. Graves	September salary	579	120 00
	G. H. McKnight	September salary	580	120 00
	H. C. Allen	September salary	581	120 00
	B. L. Bowen	September salary	582	225 00
	C. A. Bruce	September salary	583	140 00
	J. D. Bachelder	September salary	584	120 00
	D. S. White	September salary	585	180 00
	Paul Fischer	September salary	586	180 00
	Septimus Sisson	September salary	587	150 00
	O. V. Brumley	September salary	588	75 00
	Herbert Osborn	September salary	589	225 00
	J. S. Hine	September salary	590	100 00
	F. L. Landacre	September salary	591	100 00
	W. O. Thompson	September salary	592	416 67
	K. H. Duncan	September salary	593	58 33
	Carl E. Steeb	September salary	594	75 00
	Edith R. Hubler	September salary	595	33 33
	Helen R. Powell	September salary	596	35 00
	Edith D. Cockins	September salary	597	60 00
	W. C. McCracken	September salary	598	150 00
	Wm. Standley	September salary	599	58 33
	W. H. Case	September salary	600	50 00
	Benj. LeBay	September salary	601	50 00
	Thos. Boude	September salary	602	50 00
	Marion Peck	September salary	603	45 00
	Geo. Rose	September salary	604	70 00
	Earl Kimmel	September salary	605	20 00
	John Ricketts	September salary	606	30 00
	Thos. E. Osborn	September salary	607	45 00
	James Kelley	September salary	608	30 00
	Chas. M. Hicks	September salary	609	45 00
	Ray Barton	September salary	610	20 00
	G. A. Goodspeed	September salary	611	40 00
	John Brown	September salary	612	15 00
	John Brown	September salary	613	25 00
	D. D. Geren	September salary	614	40 00
	W. Whitestine	September salary	615	40 00

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1901				
Sept.28	H. Chantler	September salary	616	40 00
	G. C. Denny	September salary	617	40 00
	M. N. Cook	September salary	618	40 00
	Wm. Conklin	September salary	619	40 00
	H. M. Templin	September salary	620	40 00
	Laurel Hill	September salary	621	33 33
10	Herbert Osborn	Summer salary	622	90 00
	F. L. Landacre	Summer salary	623	70 00
	Harriet G. Burr	Summer salary	624	25 00
11	R. M. Rownd, P. M.	500 No. 5 envelopes	625	10 60
	Watertown Thermometer Co.	Thermometers	626	54 00
	Cent. Union Telephone Co.	Phone rental for Sept.	627	5 00
13	Mrs. R. S. Creed	Labor	628	8 00
16	R. M. Rownd, P. M.	Postal deposit and guide	629	12 00
23	Lily Weeks	Janitress service	630	5 00
25	W. S. Carruthers	Bleachers	631	1,000 00
	Thos. J. Godfrey	Expenses as trustee	632	11 85
26	Danforth E. Ball	Janitor observatory	633	10 00
	Cols. Street Ry. Co.	Car tickets	634	5 00
28	M. T. Cook	September salary	635	30 00
	Rudolph Hirsch	September salary	636	30 00
	Elizabeth H. Smythe	September salary	637	40 00
	W. C. Weir	September salary	638	25 00
	Thos. E. French	Balance September salary	639	20 00
	J. A. Shauck	September salary	640	50 00
	J. M. Butler	September salary	641	35 00
	R. M. Martin	August and Sept. salary	642	30 00
	J. R. Chamberlain	September salary	643	30 00
	C. G. Conley	September salary	644	30 00
	Grace L. Pitts	September salary	645	30 00
	C. S. Van Dyke	September salary	646	30 00
	Geo. W. Frost	September salary	647	60 00
	A. B. Sproat	September salary	648	25 00
	Clara C. Ewalt	September salary	649	30 00
	F. C. McKinney	September salary	650	30 00
28	Anna E. Williams	September salary	651	30 00
	David R. Major	September salary	652	150 00
	F. E. Fleischer	September salary	653	40 00
	Fred B. Brewer	September salary	654	50 00
	James Mitchell	September salary	655	40 00
	J. McLain Smith	Expenses as trustee	656	14 20
	Wash Townsel	September salary	657	25 00
30	C. H. Woodruff	Aug. and Sept. salary	658	130 00
	Mrs. M. Kellenberger	Services dom. econ.	659	25 00
	Lily Weeks	Salary	660	6 00
Oct. 2	George Feick	Estimate No. 3 law bldg.	661	5,812 84
4	W. H. Artrip	Campus work	662	13 25
	C. R. Adams	Campus work	663	2 50
	Ag. Student Pub. Co.	Advertisement	664	80 00
	C. A. Bickman	Campus work	665	1 25
	Clara M. Berryman	Money advanced	666	2 30
	E. G. Bailey	Janitor work	667	3 60
	Florence Bell	Clerical services	668	3 00
	Thomas Beer	Hauling water	669	3 00
	J. N. Bradford	Lantern slides	670	50 00
	Nelson Beaver	Carpenter work	671	11 20
	W. E. Cook	Campus work	672	18 90

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1901				
Oct. 4	J. F. Coe	Campus work	673	36 00
	G. A. Crabb	Campus work	674	1 87
	Fred Cockins	Guide service	675	1 00
	R. H. Cunningham	Guide service	676	5 35
	C. H. Clevenger	Guide service	677	1 07
	E. D. Coberly	Guide service	678	8 50
	Harry Covan	Labor	679	8 50
	Thomas O. Cappel	Carpenter work	680	78 40
	W. Stillman Dutton	Architect's fees	681	145 32
	R. D. DeWolf	Student labor	682	15 40
	Oliver Dunlap	Carpenter work	683	19 60
	G. H. Day	Carpenter work	684	16 80
	Grace Eagleson	Clerical service	685	11 40
	L. W. Funk	Student labor	686	16 20
	C. L. Fournier	Campus work	687	4 20
	Clare Fauver	Campus work	688	3 75
	F. E. Fleischer	Campus work	689	9 18
	E. E. Finney	Campus work	690	1 25
	L. D. Fauver	Guide service	691	2 00
	W. D. Griffith	Campus work	692	27 67
	H. J. Gerard	Guide service	693	3 88
	D. L. Hurst	Campus work	694	18 12
	C. D. Hyatt	Campus work	695	1 25
	W. W. Hackney	Typewriting	696	1 00
	H. Huddleson	Labor	697	3 00
	Albert Hessinger	Carpenter work	698	19 60
	A. L. Harrington	Student labor	699	11 50
	Wm. Kimball	Campus work	700	6 00
	F. R. Kunkle	Student labor	701	9 50
	S. T. Knight	Tunnel, cistern, etc.	702	791 40 †
	John Marling	Campus work	703	5 62
	J. A. McNutt	Campus work	704	2 50
	R. H. Minns	Campus work	705	1 25
	R. M. Martin	Guide service	706	3 50
	F. C. McKinney	Guide service	707	8 87
	E. H. Moore	Guide service	708	18 50
	Lee Maynard	Student labor	709	6 87
	R. E. McIntosh	Student labor	710	34 25
	W. Morelan	Carpenter work	711	53 55
	J. C. Perry	Guide	712	18 40
	Charles Pixler	Labor	713	35 25
	Ed. Quackenbush	Janitor work	714	2 75
	Wm. Roberts	Labor on green house	715	85 10
	J. H. Randall	Carpenter work	716	56 70
	Mason Snow	Night watchman	717	21 00
	H. P. Snow	Campus work	718	1 50
	W. F. Stock	Campus work	719	1 87
	N. E. Shaw	Campus work	720	1 87
	Carl E. Steeb	Notary work	721	1 00
	J. A. Stiver	Guide service	722	4 50
	Elmer Stevens	Carpenter work	723	19 60
	John A. Schneider	Carpenter work	724	59 55
	H. Weber	Campus work	725	18 00
	James Wiseman	Campus work	726	7 50
	West & Thompson	Books	727	295 61
	F. R. West	Book	728	2 64
	Lewis Watson	Carpenter work	729	12 60
	Amer. Dist. Tel Co.	Fire alarm boxes	730	64 00

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1901				
Oct. 4	Acme Paving Co.....	Est. No. 1, laying walks...	731	504 00
	American Bridge Co...	Angles	732	4 84
	J. S. Abbott & Co.....	Brass	733	13 63
	Batterson Dec. House..	Decoration	734	77 00
	David C. Beggs Co.....	Papering, etc.....	735	95 40
	Bryant Bros.....	Decorating library	736	25 00
	Bucher Engraving Co..	Half tones	737	2 60
	Samuel Butler & Co....	Gluten meal	738	15 75
	Wm. Burdell, Jr.....	Supplies	739	17 25
	Buckeys Brass F'dy....	Castings	740	11 91
	Blackwood, Green & Co.	Hardware	741	21 45
	Columbus Mdse Co....	Labels	742	6 56
	J. E. Clark & Co.....	Stanleys plates	743	10 20
	Columbus Mill and Mine Supply Co.	Hose	744	5 50
	Columbus Brass Co....	Couplings	745	1 75
	Columbus Supply Co...	Supplies	746	231 39
	Capital City Machine Works	Supplies	747	61 81
	Cent. Ohio Paper Co...	Paper, etc.	748	25 41
	Capital City Machine Works	Channels, bolts, etc.	749	17 43
	Geo. D. Cross Lum. Co.	Lumber	750	98 63
	Champlin Printing Co..	Printing	751	261 59
	Dunn, Taft & Co.....	1 doz. cotton	752	55
	Engelke & Bigelow.....	Freight and cartage	753	118 61
	Electric Supply and Construction Co.	Supplies	754	13 74
	Erner & Hopkins.....	Supplies	755	55 03
	A. O. Foote.....	Horse mat trees	756	30 00
	H. L. Fishback & Co...	Oil	757	3 75
	Franklin Toilet Supply Co.	Towel service	758	14 62
	J. J. Gheen.....	Plastering	759	10 50
	Green, Joyce & Co.....	Cambric, towels, etc.	760	132 31
	A. S. W. Huffman.....	Furnace, etc.	761	6 10
	N. C. Hager.....	Groceries, etc.	762	8 21
	Fred. J. Heer.....	Portfolio files	763	10 00
	Hann & Adair.....	Printing	764	19 94
	P. Hayden Sad. Hdw. Co.	Plates and castings	765	61 33
	W. A. Jones.....	Feed	766	124 63
	J. H. Jones.....	Horse	767	155 00
	Jantons Art Store.....	Water color studies	768	3 00
	Kauffman-Lattimer Co.	Drugs and chemicals	769	499 10
	E. C. Kissinger.....	Sand, etc.	770	38 25
	Krauss, Butler & Benham Co.....	Supplies and mdse.	771	56 25
	Kelton & Converse.....	Lumber	772	39 80
	Kilbourne, Jacobs Mfg. Co	Cart	773	6 50
	R. D. Lamb.....	Inks	774	2 00
	Lutheran Book Concern.	Building	775	3 46
	Oscar S. Lear.....	Paper, ribbon and repairs.	776	7 00
	Moneypeny-Hammond Co	Matches	777	8 25
	McClelland & Co.....	Receipts	778	75
	J. S. Maclean	Mill work	779	24 75
	McAllister, Mohler & Co	Tables and chairs	780	8 15

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1901				
Oct. 4	Nitschke Bros.	Printing	781	53 20
	Onyx Paint Store	Paint	782	23 15
	C. H. Benson	Handbook	783	5 00
	Ohio Tool Co	Hickory handles	784	2 00
	C. T. Phillips	Paper	785	2 40
	The Press-Post	Legal notice	786	10 15
	Chas. S. Prosser	Map	787	2 05
	Chas. J. Palmer	Hood and repairs	788	43 26
	James Penn	Hauling	789	12 02
	Ruggles, Gale & Co	Supplies	790	6 15
	C. H. D. Robins Co	Crash and cheese cloth	791	9 04
	Smith Bros. Hdw. Co	Files and padlock	792	26 76
	Schroth & Potter	Shades	793	76 53
	Seraphim Bl'k Book Co.	Binding	794	119 60
	The Sparks-Seward Co.	Cupola block	795	6 00
	Standard Oil Co	Oil	796	8 32
	Sheppard & Co	Printing	797	10 00
	Schoedinger & Elliott	Oil soap	798	29 58
	Schoedinger, Fearn & Co	Hardware	799	55 18
	Taylor, Williams & Co	Coal	800	6 70
	Tingley Bros.	Feed	801	60 30
	Tallmadge Hdw. Co	Hardware	802	24 96
	Spahr & Glenn	Printing	803	27 25
	H. C. Wylie	Lettering tablet	804	4 80
	C. H. Walcott	Stone	805	107 90
	J. M. & W. Westwater	Jars, etc.	806	17 70
	E. N. Yeiser	Rent of wagon	807	6 75
	A. L. Yardley	Window screens	808	11 50
	J. H. Zinn	Sand	809	14 40
	Amer. Grange Bulletin.	Advertisement	810	12 60
	W. H. Anderson & Co	Books	811	22 50
	American Microscopical Society	Subscription	812	2 00
	American Journal of Physiology	Volume VI	813	5 00
	D. Appleton & Co	Annual	814	5 00
	W. H. Anderson & Co	Reports	815	238 50
	Boston Book Co	Books	816	239 00
	C. W. Bardeen	Publications	817	13 50
	R. R. Bowker	Trade list	818	2 00
	Brown & Sharp Mfg. Co.	Gears and saw	819	5 28
	Bausch & Lomb Optical Co	Supplies	820	309 91
	The Caxton Co	Lithoplate	821	42 32
	Circulation Index Co	Index	822	5 00
	Colliery Engineer Co	Mines and minerals	823	2 00
	Crucible Steel Co	Steel	824	63 44
	Christy Fire Clay Co	Pot clay	825	9 01
	Com. and Financial Chronicle	Subscription	826	10 00
	Crosby Steam Gauge and Valve Co	Supplies	827	87 20
	Central Electric Co	Frame, carbons, etc.	828	24 70
	The Engineering Record	Advertisement	829	20 00
	Eimer & Amend	Chemical supplies	830	537 40
	Julian D'Este Co	Floats, cage and stem	831	12 00

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1901				
Oct. 4	Hohmann & Maurer Mfg. Co.	Chemicals	832	9 00
	Geo. T. Johnson Co.	Toilet paper	833	49 50
	Jarecki Mfg. Co.	Radiators	834	107 55
	Journal of Com. and Com. Bulletin	Subscription	835	12 00
	Library Bureau	Cards	836	3 20
	The Lunkenheimer Co.	Gate valves	837	20 78
	Morse Twist Drill and Machine Co.	Drills	838	5 00
	National Ammonia Co.	Ammonia	839	11 64
	Carl L. Osberg	Camera	840	20 00
	Richmond Chair Co.	Chairs	841	88 20
	Scientific Pub.Co.	Advertisement	842	28 73
	Standard Chain Co.	Iron	843	6 70
	E. H. Sargent & Co.	Chemical supplies	844	156 34
	G. E. Stechert	Books	845	344 09
	South Bend Iron Works	Points	846	2 67
	Thatcher Mfg. Co.	Bottles	847	20 20
	University of Chicago	Am. Journal of Sociology	848	2 00
	C. F. Van Horne	Books	849	10 00
	Whitall-Tatum Co.	Glasses	850	19 89
	Worcester Machine Screw Co.	Screws	851	5 50
	Walworth Mfg. Co.	Cocks	852	26 00
	Webb Stationery and Printing Co.	Ink and supplies	853	6 25
	Westinghouse Electric & Mfg. Co.	Transformers	854	140 00
	Western Kieley Steam Spec. Co.	Governor	855	15 00
	Western Electric Instrument Co.	Supplies	856	205 70
	F. M. Wilson	Silo	857	360 00
	Worcester Salt Co.	Salt	858	1 30
	Cent. Union Tel. Co.	October rental	859	5 00
	Columbus Gas Co.	September gas	860	80 85
	F. C. Clark	Office supplies	861	1 60
	W. O. Thompson	N. E. A. membership	862	2 00
Oct. 5	R. E. McIntosh	September salary	863	12 50
Oct. 7	Alexis Cope	October salary	864	187 50
	Lily Weeks	Janitress	865	6 00
	E. G. Bailey	September salary	866	18 00
Oct. 8	F. C. Caldwell	Petty cash items	867	4 94
Oct. 12	Columbus Water Wks.	Water rent to Oct. 1, 1901.	868	607 76
	Wm. R. Thomas	September salary	869	20 00
Oct. 14	R. M. Rownd, P. M.	Envelopes	870	21 20
	Lily Weeks	Janitress work	871	6 00
Oct. 26	Thos. F. Hunt	October salary	872	250 00
	W. D. Gibbs	October salary	873	175 00
	John W. Decker	October salary	874	160 00
	Frank Ruhlen	October salary	875	75 00
	H. A. Weber	October salary	876	225 00
	A. E. Vinson	October salary	877	90 00
	Rudolph Hirsch	October salary	878	30 00
	Geo. W. Knight	October salary	879	250 00
	T. C. Smith	October salary	880	120 00
	A. H. Tuttle	October salary	881	100 00

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1901				
Oct. 26	A. M. Bleile	October salary	882	225 00
	C. B. Morrey	October salary	883	120 00
	M. Dresbach	October salary	884	50 00
	W. C. Mills	October salary	885	40 00
	H. C. Lord	October salary	886	225 00
	C. G. Conley	October salary	887	30 00
	W. A. Kellerman	October salary	888	225 00
	J. H. Schaffner	October salary	889	120 00
	J. C. Bridwell	October salary	890	25 00
	Elma B. Perry	October salary	891	25 00
	F. J. Tyler	October salary	892	25 00
	O. E. Jennings	October salary	893	45 00
	S. A. Norton	October salary	894	120 00
	Wm. McPherson	October salary	895	225 00
	W. E. Henderson	October salary	896	140 00
	C. W. Foulk	October salary	897	110 00
	C. P. Linville	October salary	898	30 00
	W. L. Dubois	October salary	899	30 00
	H. T. Hance	October salary	900	30 00
	C. N. Brown	October salary	901	225 00
	C. E. Sherman	October salary	902	140 00
	W. L. Davies	October salary	903	50 00
	E. E. Harrold	October salary	904	85 00
	R. W. Funk	Ostober salary	905	45 00
	Edward Orton, Jr	October salary	906	200 00
	A. V. Bleininger	October salary	907	100 00
	Minnie A. Stoner	October salary	908	180 00
	C. P. Souther	October salary	909	120 00
	J. N. Bradford	October salary	910	200 00
	Thos. E. French	October salary	911	140 00
	Thos. K. Lewis	October salary	912	100 00
	Silas Martin	October salary	913	100 00
	J. H. Vosskuehler	October salary	914	100 00
	J. R. Chamberlain	October salary	915	30 00
	F. C. Clark	October salary	916	200 00
	J. E. Hagerty	October salary	917	110 00
	Grace L. Pitts	October salary	918	30 00
	D. R. Major	October salary	919	150 00
	F. C. Caldwell	October salary	920	180 00
	F. A. Fish	October salary	921	100 00
	R. D. De Wolf	October salary	922	30 00
	J. P. Covan	October salary	923	80 00
	A. C. Barrows	October salary	924	225 00
	J. R. Taylor	October salary	925	140 00
	W. H. Siebert	October salary	926	160 00
	Chas. S. Prosser	October salary	927	180 00
	J. A. Bownocker	October salary	928	150 00
	E. A. Eggers	October salary	929	225 00
	C. W. Mesloh	October salary	930	140 00
	B. A. Eisenlohr	October salary	931	80 00
	J. R. Smith	October salary	932	225 00
	A. W. Hodgman	October salary	933	140 00
	W. S. Elden	October salary	934	120 00
	W. R. Lazenby	October salary	935	225 00
	V. H. Davis	October salary	936	62 50
	F. E. Sanborn	October salary	937	200 00
	W. A. Knight	October salary	938	120 00
	W. H. Renck	October salary	939	100 00

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1901				
Oct. 26	C. P. Crowe	October salary	940	100 00
	C. S. Van Dyke	October salary	941	30 00
	S. C. Derby	October salary	942	225 00
	W. F. Hunter	October salary	943	250 00
	J. H. Collins	October salary	944	20 00
	J. A. Schauck	October salary	945	50 00
	E. B. Kinkead	October salary	946	120 00
	W. H. Page	October salary	947	180 00
	E. O. Randall	October salary	948	70 00
	J. N. Bittler	October salary	949	35 00
	Olive Jones	October salary	950	135 00
	F. A. Bohn	October salary	951	50 00
	Harriet Townshend	October salary	952	55 00
	Gertrude S. Kellicott	October salary	953	55 00
	Maude D. Jeffrey	October salary	954	55 00
	C. B. Guittard	October salary	955	55 00
	C. B. Sayre	October salary	956	20 00
	Elizabeth Smythe	October salary	957	40 00
	R. D. Bohannon	October salary	958	225 00
	Geo. W. McCoard	October salary	959	160 00
	J. E. Boyd	October salary	960	150 00
	C. L. Arnold	October salary	961	120 00
	H. W. Kuhn	October salary	962	100 00
	S. E. Rasor	October salary	963	90 00
	J. F. Travis	October salary	964	30 00
	K. D. Swartzel	October salary	965	120 00
	W. T. Magruder	October salary	966	225 00
	E. A. Hitchcock	October salary	967	175 00
	Geo. W. Frost	October salary	968	60 00
	A. F. Hall	October salary	969	66 66
	N. W. Lord	October salary	970	200 00
	E. E. Somermeier	October salary	971	100 00
	A. B. Sproat	October salary	972	25 00
	Gustav Bruder	October salary	973	20 00
	F. A. Ray	October salary	974	200 00
	G. B. Kauffman	October salary	975	200 00
	C. A. Dye	October salary	976	100 00
	W. H. Scott	October salary	977	225 00
	T. H. Haines	October salary	978	120 00
	A. E. Davies	October salary	979	90 00
	C. P. Linhart	October salary	980	160 00
	Clara M. Berryman	October salary	981	75 00
	D. C. Huddleson	October salary	982	50 00
	B. F. Thomas	October salary	983	225 00
	A. D. Cole	October salary	984	190 00
	F. E. Kester	October salary	985	90 00
	H. B. Brooks	October salary	986	25 00
	J. V. Denney	October salary	987	225 00
	W. L. Graves	October salary	988	120 00
	G. H. McKnight	October salary	989	120 00
	H. C. Allen	October salary	990	120 00
	Clara C. Ewalt	October salary	991	30 00
	Anna E. Williams	October salary	992	30 00
	F. C. McKinney	October salary	993	30 00
	B. L. Bowen	October salary	994	225 00
	C. A. Bruce	October salary	995	140 00
	J. D. Batchelder	October salary	996	120 00
	D. S. White	October salary	997	180 00

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1901				
Oct. 26	Paul Fischer	October salary	998	180 00
	Septimus Sisson	October salary	999	150 00
	O. V. Brumley	October salary	1000	75 00
	Herbert Osborn	October salary	1001	225 00
	J. S. Hine	October salary	1002	100 00
	F. L. Landacre	October salary	1003	100 00
	M. T. Cook	October salary	1004	30 00
	W. O. Thompson	October salary	1005	416 67
	K. H. Duncan	October salary	1006	58 33
	Carl E. Steeb	October salary	1007	75 00
	Edith R. Hubler	October salary	1008	33 33
	Helen R. Powell	October salary	1009	35 00
	E. D. Cockins	October salary	1010	60 00
	W. C. McCracken	October salary	1011	150 00
	Wm. Standley	October salary	1012	58 33
	W. H. Case	October salary	1013	50 00
	Benj. LeBay	October salary	1014	50 00
	Thomas Boude	October salary	1015	50 00
	Fred B. Brewer	October salary	1016	50 00
	Marion Peck	October salary	1017	45 00
	Geo. R. Rose	October salary	1018	70 00
	Earl Kimmel	October salary	1019	20 00
	James Mitchell	October salary	1020	40 00
	John Ricketts	October salary	1021	45 00
	Thos. E. Osburn	October salary	1022	45 00
	James Kelley	October salary	1023	30 00
	Chas. M. Hicks	October salary	1024	45 00
	Ray Barton	October salary	1025	20 00
	G. A. Goodspeed	October salary	1026	40 00
	F. E. Fleischer	October salary	1027	40 00
	John Brown	October salary	1028	25 00
	John Brown	October salary	1029	15 00
	D. D. Geren	October salary	1030	40 00
	Wm. R. Thomas	October salary	1031	40 00
	Wm. Whitestine	October salary	1032	40 00
	H. Chantler	October salary	1033	40 00
	G. C. Denny	October salary	1034	40 00
	M. N. Cook	October salary	1035	40 00
	Wm. Conklin	October salary	1036	40 00
	H. M. Templin	October salary	1037	40 00
	W. Townsell	October salary	1038	25 00
	H. H. Hamilton	October salary	1039	12 50
	R. E. McIntosh	October salary	1040	12 50
	E. G. Bailey	October salary	1041	18 00
	R. M. Martin	October salary	1042	20 00
	Laurel Hill	October salary	1043	33 33
	C. H. Woodruff	October salary	1044	65 00
	W. C. Weir	October salary	1045	25 00
17	Columbus Citizens' Telephone Co.	Telephone rentals	1046	97 50
	R. M. Rownd, P. M.	Postage stamps	1047	1 00
18	J. F. Winstead	Painting	1048	16 10
21	Lily Weeks	Salary, one week	1049	6 00
	L. B. Wing	trustee expenses	1050	3 10
24	T. H. Haines	Laboratory supplies	1051	2 35
	J. F. Winstead	Enameling bath	1052	8 10
26	S. A. Norton	Bal. Sept. and Oct. salary.	1053	10 00
25	Mrs. M. A. Kellenberger	Services	1054	25 00

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1901				
Oct. 28	Columbus Water Works.	Deposit for meter at gym.	1055	375 00
	Lily Weeks	Services as janitress one week	1056	6 00
30	F. C. Clark	Office supplies	1057	1 87
	R. M. Rownd, P. M.	Postage stamps	1058	16 75
Nov. 1	W. G. Johnson	Student labor	1059	5 25
	D. C. Sawyer	Custom house duties	1060	1 20
4	Lily Weeks	Salary	1061	6 00
6	Mildred Waters	Salary for Sept. and Oct., 1901	1062	60 00
7	Alexis Cope	November salary	1063	187 50
	George Feick	Estimate No. 4, law bldg.	1064	9,010 75
8	L. B. Wing	Tools for ind. arts dept.	1065	3 15
	W. Stillman Dutton	Architect's fees	1066	225 25
9	T. J. Godfrey	Expense attending board meeting	1067	6 75
	C. R. Adams	Campus work	1068	1 25
	W. T. Atherton	Campus work	1069	8 07
	H. J. Baker	Student labor	1070	1 00
	E. G. Bailey	Pipe fitting	1071	4 58
	C. Bickman	Campus work	1072	4 37
	I. J. Brobeck	Campus work	1073	1 25
8	W. O. Thompson	Expenses to New Haven	1074	46 50
	Thomas Beer	Campus work	1075	1 37
9	J. A. Beer	Laboratory material	1076	1 25
	C. P. Burkey	Work in library	1077	14 05
	H. O. Buman	Labor	1078	3 00
	Thomas Beer	Hauling water	1079	7 12
	Nelson Beaver	Carpenter work	1080	53 20
	Harry Croswell	Campus work	1081	1 25
	J. F. Coe	Campus work	1082	43 65
	W. L. Clevinger	Campus work	1083	10 09
	G. A. Crabb	Campus work	1084	5 43
	W. E. Cook	Campus work	1085	20 01
	W. C. Conklin	Janitor work	1086	12 00
	W. L. Clevinger	Student labor	1087	1 18
	Thos. O. Cappell	Carpenter work	1088	66 15
	Richard Peckham	Carpenter work	1089	22 40
	A. J. Duncan	Student labor	1090	2 75
	Grover DeLong	Campus work	1091	15 00
	C. A. DeMuth	Campus work	1092	4 93
	A. E. Day	Campus work	1093	3 75
	R. C. Doneghue	Campus work	1094	1 75
	H. C. Delong	Campus work	1095	13 75
8	M. Dresbach	Dept. supplies	1096	5 84
9	Gideon H. Day	Carpenter work	1097	63 00
	Oliver Dunlap	Carpenter work	1098	74 55
	William C. Esker	Carpenter work	1099	23 80
	J. A. Frederick	Carpenter work	1100	1 18
	Wm. Field	Campus work	1101	36 45
	E. E. Finney	Campus work	1102	7 37
	L. W. Funk	Student labor	1103	20 70
	C. W. Foulk	Dept. supplies	1104	33 75
	W. D. Griffith	Campus work	1105	33 07
	H. J. Gerard	Guide service	1106	6 00
	Carl Hagerman	Campus work	1107	8 12
	J. R. Haywood	Campus work	1108	6 50
	D. L. Hurst	Campus work	1109	3 75

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1901				
Nov. 9	James S. Hine	Dept. supplies	1110	7 40
	W. A. Hite	Student labor	1111	14 50
	Harry T. Hance	Cleaning apparatus	1112	4 65
	Wm. W. Hackney	Mimeograph and labor	1113	18 80
	Albert Hessinger	Carpenter work	1114	49 00
	J. R. Johnson	Campus work	1115	38 70
	Jessie B. Karns	Stenographic work	1116	32 00
	F. R. Kunkle	Student labor	1117	20 90
	W. F. Kern	Laboratory work	1118	7 80
	Harry Kinnear	Services wiring	1119	20 88
	W. A. Kellerman	Laboratory supplies	1120	19 28
	Frank C. Long	Guide service	1121	11 88
	Thos. K. Lewis	Book	1122	2 00
	C. O. Morton	Campus work	1123	1 25
	Bert Miskemeir	Campus work	1124	1 81
	Max Morse	Microscope	1125	22 00
	Wm. McPherson	Expenses to Oberlin	1126	7 05
	Ora F. Metz	Janitor work	1127	18 23
	E. R. Minns	Labor in dept	1128	62
	R. E. McIntosh	Wiring	1129	14 25
	W. Morelan	Carpenter work	1130	26 25
	O. A. Nichols	Campus work	1131	1 12
	Ellsworth Ogden	Labor in dept	1132	5 23
	Chas. Pixler	Labor	1133	40 50
	Geo. W. Prince	Campus work	1134	1 18
	J. F. Prahl	Campus work	1135	1 81
	G. Pollard	Campus work	1136	2 70
	Chas. S. Prosser	Money advanced	1137	4 08
	B. C. Parrett	Laboratory assistance	1138	4 05
	H. M. Plum	Laboratory assistance	1139	8 72
	C. C. Poindexter	Student labor	1140	6 38
	M. Iniroga	Student labor	1141	2 37
	G. Rogers	Campus work	1142	1 25
	Frank Ruhlen	Pay of Jas. Weisman	1143	14 37
	J. H. Randall	Carpenter work	1144	71 20
	Herb Skeels	Campus work	1145	1 18
	M. E. Shaw	Campus work	1146	6 87
	Wm. Stock	Campus work	1147	1 75
	J. A. Stiver	Guide service	1148	12 13
	Geo. Sincoe	Student labor	1149	5 25
	F. W. Schwab	Laboratory assistance	1150	7 95
	John A. Schneider	Carpenter work	1151	74 20
	Elmer Stevens	Carpenter work	1152	67 55
	T. H. Tangemann	Work in library	1153	20 00
	G. O. Thompson	Campus work	1154	3 93
	J. H. Tillman	Guide service	1155	4 00
	G. B. White	Campus work	1156	1 87
	H. Weber	Campus work	1157	64 05
	E. D. Ward	Campus work	1158	1 87
	E. Wallace	Student labor	1159	13 65
	E. N. Webb	Laboratory assistance	1160	6 90
	Lewis Watson	Carpenter work	1161	70 00
11	Lily Weeks	Janitress	1162	6 00
	Central Supply Co.	Slate tub	1163	13 00
12	Am. Sewer Pipe Co.	Pipe, etc.	1164	24 98
	Amer. Dist. Telegraph Co.	Night watch boxes	1165	81 00
	J. S. Abbott & Co.	Hardware	1166	76 14

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1901				
Nov. 12	Acme Paving Co.....	Floors and sidewalk.....	1167	1,096 75
	Bucher Engraving Co..	Makio acct.	1168	50 00
	Samuel Butler Co.....	Balance due on account..	1169	3 50
	Batterson Decorative House	Papering and cleaning....	1170	30 00
	Bowden Towel Supply Co.	Towel service	1171	32 22
	H. Braun, Sons & Co...	Drugs, chemicals, etc.....	1172	137 50
	Blackwood, Green & Co.	Hardware and tinning....	1173	264 92
	Citizens' Telephone Co.	Special equipment	1174	7 05
	Columbus Photo Supply Co.	Supplies	1175	2 54
	Central Ohio Paper Co.	Paper	1176	81 33
	Columbus Brass Co....	Spouts and bolts.....	1177	7 80
	Cherington Ptg. and Engraving Co.	Engraving autograph	1178	3 00
	Col. Carriage Hardware Co.	Castings	1179	2 18
	Charles M. Cott.....	Labels	1180	3 00
	Col. M. and M. Supply Co.	Packing	1181	2 10
	Capital City Machine Works	Drills, gauge, etc.....	1182	3 15
	The H. Cole Co.....	One roll paper.....	1183	1 00
	Columbus Mdse Co.....	Labels, etc.	1184	6 51
	Central Ohio Oil Co....	Oils, etc.	1185	34 60
	Champlin Printing Co..	Printing	1186	79 50
	G. W. Clarke & Co.....	Lumber	1187	79 19
	Geo. D. Cross Lumber Co.	Lumber	1188	521 57
	Columbus Supply Co...	Supplies	1189	230 42
	E. Doddington & Co....	Lumber	1190	378 54
	Engelke & Bigelow.....	Freight and cartage.....	1191	127 86
	Elect. Supply and Con. Co.	Supplies	1192	99 19
	Erner & Hopkins.....	Supplies	1193	77 58
	The Fish Stone Co.....	Post and flags.....	1194	8 00
	Henry Goldsmith	Band music	1195	2 60
	N. C. Hager.....	Groceries	1196	13 63
	P. Hayden Saddlery Hardware Co.	Steel, sand, etc.....	1197	112 60
	Hart & Crouse Co.....	Bars, etc.	1198	3 69
	Chas. W. Herb.....	Boxes	1199	11 00
	The Hanna Paint Mfg. Co.	Paints, etc.	1200	7 25
	The Hall-Collins Hardware Co.	Glass, etc.	1201	135 37
	J. C. Howard.....	Painting	1202	193 85
	Jeffrey Mfg. Co.....	Steel bars	1203	1 84
	Kauffman, Lattimer & Co.	Chemical supplies	1204	135 79
	J. F. Killits.....	Putting up pipe, etc.....	1205	2 75
	Elizabeth Kaiser	Buckets	1206	1 50
	S. T. Knight.....	Final estimate tunnel.....	1207	546 25
	Krauss, Butler & Benham Co.	Cocoa mats	1208	8 00
	Kelton & Converse.....	Lumber	1209	258 08
	Livingston Seed Co....	Seeds	1210	77 63

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1901				
Nov. 12	Lawrence Press Co.....	Printing	1211	3 50
	Oscar S. Lear.....	Mimeograph, etc.	1212	52 45
	M. C. Lilley & Co.....	Swords, bugles, etc.....	1213	58 00
	Murray City Coal Co..	Coal	1214	1,001 89
	J. J. Marvin.....	Board	1215	5 50
	McDonald & Steube....	Polish	1216	1 00
	Monypeny-Hammond Co.	Soaps, etc.	1217	6 25
	McClelland & Co.....	Paper and stencils.....	1218	3 95
	Logan McCormick	Frames	1219	5 65
	J. S. Maclean.....	Lumber	1220	146 00
	McAllister, Mohler & Co.	Furniture	1221	143 75
	W. H. Miller Co.....	Supplies	1222	286 28
	Nitschke Bros.	Printing and supplies.....	1223	79 75
	Orr, Brown & Price....	Glycerine, etc.	1224	24 70
	Oger Bros.	Clock	1225	5 00
	Jas. Ohlen Sons' Saw Mfg. Co.	Steel	1226	16 50
	D. M. Osborne & Co....	Sulky harrow	1227	17 50
	Ohio Furniture Co.....	Mantel work, etc.....	1228	62 75
	The P. Logocyte.....	Advertisement	1229	30 00
	Parsons, Frakes & Son.	Milk	1230	1 00
	C. T. Phillips.....	Papering	1231	12 35
	C. R. Parish & Co.....	Desk and chair.....	1232	24 00
	Pitz Bros.	Feed	1233	69 00
	Payne, McDonald & Co..	Hardware	1234	3 73
	James Penn	Hauling	1235	6 79
	Chas. J. Palmer.....	Cans, etc.	1236	15 69
	C. H. D. Robbins Co....	Dry goods	1237	11 29
	Reeves Bros.	Lock hasps	1238	10 00
	Ruggles, Gale & Co....	Office supplies	1239	11 05
	Reynolds Bros.	Tooth floats	1240	7 50
	Andrew Spittal	Work on apparatus.....	1241	33 25
	A. H. Smythe.....	Twine, etc.	1242	3 40
	J. A. Schneider.....	Labor	1243	1 75
	Standard Oil Co.....	Oil and gasoline	1244	48 30
	Smith Bros. Hardware Co.	Hardware	1245	39 80
	Frank Sutphen	Instruments and repairs..	1246	32 45
	Seraphim Blank Book Co.	Binding	1247	170 20
	Schoedinger, Fearn & Co.	Hardware	1248	50 39
	T. T. Tress.....	Clock	1249	4 50
	Tracy, Wells & Co.....	Supplies	1250	45 70
	Taylor, Williams & Co..	Coal	1251	57 73
	Tallmadge Hardware Co.	Hardware	1252	35 69
	Vogelgesang Furnace Co.	Repairing furnaces	1253	33 60
	The Williams-Herdman Co.	Jars	1254	3 24
	L. A. Wells & Co.....	Books	1255	8 25
	C. A. Williams.....	Prints of law building...	1256	60
	W. S. Wiggins.....	Stamps	1257	4 77
	H. E. Williams.....	Student labor	1258	3 75
	J. M. & W. Westwater..	Shade and chimney.....	1259	85
	West & Thompson.....	Books	1260	85 99
	Carl E. Steeb.....	November salary inst.....	1261	75 00
	W. H. Anderson & Co..	Books	1262	13 00

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1901				
Nov. 12	A. H. Andrews & Co....	Erasers	1263	9 00
	Armstrong Bros. Tool Co.	Tools	1264	17 80
	Am. Aristotype Co.....	Photo supplies	1265	9 28
	Bryan, Marsh & Co....	Lamps	1266	50 00
	The Babcock-Wilcox Co.	Tile and castings.....	1267	10 16
	D. H. Burrell & Co.....	Bottles	1268	13 00
	Thos. Buchanan & Co..	Carb. wheels	1269	5 39
	The Caxton Co.....	Lithoplate	1270	7 10
	Clucas & Boddington Co.	Bulbs	1271	77 50
	Cushman Chuck Co.....	Chuck	1272	2 00
	Charity Organization Society	Subscription	1273	1 80
	Central Electric Co.....	Gongs	1274	26 94
	Chaplin-Fulton Mfg. Co.	Water regulator	1275	75 00
	Doubleday-Page Co.....	Subscription	1276	3 00
	Wm. B. Dana Co.....	Chronicle	1277	1 00
	F. F. Dans Duplicator Co.	Duplicator	1278	6 00
	Direct Separator Co....	Separator	1279	40 50
	Dodge Mfg. Co.....	Fly wheels, etc.....	1280	112 80
	Egyptian Lacquer Mfg. Co.	Lacquer and thinner.....	1281	2 57
	Eimer & Amend	Apparatus	1282	24 00
	Florists' Exchange	Publication	1283	3 56
	A. Flanagan Co.....	Duplicator	1284	3 50
	Gen. Apparatus and Chem. Co.	Supplies	1285	10 40
	Geological Society of America	Bulletin	1286	5 00
	General Electric Co....	Apparatus and insurance.	1287	404 00
	B. F. Goodrich Co.....	Rubber goods	1288	97 98
	Henry Holt & Co.....	Britton's Flora	1289	4 05
	Bruno Hessling	Books	1290	39 00
	W. R. Harrison & Co..	Machinery	1291	150 00
	Henry Heil Chemical Co.	Chemicals	1292	865 58
	Edwin Hunt's Sons....	Craig locks	1293	51 63
	The Independent	Subscription	1294	2 00
13	Ohio National Bank....	Draft on London, acct. Nadler Bros. Co.....	1295	978 00
12	J. Corbett.....	Plates	1296	102 04
	Journal of Commerce & Com. Bulletin	Year book	1297	1 25
	Jones & Laughlins.....	Steel	1298	5 87
	Knauth, Nachod & Kuhne	Account of Harrasowitz Leipzig	1299	1 62
	Library Bureau	Furniture	1300	64 00
	H. Molyneux	Storing boats	1301	8 00
	Joseph McDonough	Books	1302	4 50
	The Fred Macey Co.....	Furniture	1303	64 80
	Philip Nell	Labels	1304	3 62
	Nicholson File Co.....	Files	1305	52 81
	National Ammonia Co..	Bal. due on accct.....	1306	2 86
	The Ohio Farmer	Advertisement	1307	75 60
	H. S. Parrish.....	Specimens	1308	19 50

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1901				
Nov. 12	Quimby Eng. Co.	Pump and gage	1309	39 30
	Rinald Bros.	Paint	1310	57 75
	A. Smith & Sons	Labels	1311	3 38
	Sherwood Mfg. Co.	Cleaner	1312	27 95
	G. B. Schulte Sons Co.	Supplies	1313	27 32
	L. S. Starrett Co.	Tools	1314	48 45
	Standard Chain Co.	Iron work	1315	22 54
	The Schapirograph Co.	Duplicator	1316	6 00
	Smith Premier Typewriter Co.	Typewriter and cabinet	1317	79 00
	E. H. Sargent & Co.	Supplies	1318	37 04
	Safety Cylinder Valve Co.	Valves	1319	5 25
	G. E. Stechert	Books	1320	62 38
	The Thatcher Mfg. Co.	Bottles	1321	50 50
	Arthur H. Thomas Co.	Sand and water baths	1322	54 55
	Union Manufacturing Co.	Chuck	1323	15 00
	Webb Stationery and Printing Co.	Paper and supplies	1324	26 25
	George Wahr	Books	1325	2 70
	Wagner Glass Works	Dairy supplies	1326	45 70
	H. W. Wilcox	Holstein Friesian bull	1327	150 00
	Westinghouse Elec. and Mfg. Co.	Switchboard, generator, etc.	1328	2,350 16
	J. C. Whiteside	Merchandise	1329	6 50
	Yale & Towne Mfg. Co.	Triplex block	1330	22 95
	Home Science Pub. Co.	Directories	1331	2 00
	L. C. Ferrell, Supt.	Publications	1332	2 40
14	R. M. Rownd, P. M.	Postage deposit	1333	10 00
	Columbus Gas Co.	October gas	1334	171 08
	Cent. Union Telephone Co.	October rental	1335	5 00
	W. U. Telegraph Co.	Telegrams	1336	6 01
18	Lily Weeks	Salary	1337	6 00
	W. O. Thompson	Expenses to Washington.	1338	42 35
	Alexis Cope	Expenses to Washington.	1339	58 00
20	R. M. Rownd, P. M.	Envelopes	1340	42 80
22	F. C. Clark	November salary inst.	1341	200 00
	R. M. Rownd, P. M.	500 2-cent stamps	1342	10 00
30	Thomas F. Hunt	November salary inst.	1343	250 00
	W. D. Gibbs	November salary inst.	1344	175 00
	John W. Decker	November salary inst.	1345	160 00
	Frank Ruhlen	November salary inst.	1346	75 00
	H. A. Weber	November salary inst.	1347	225 00
	A. E. Vinson	November salary inst.	1348	90 00
	Rudolph Hirsch	November salary inst.	1349	30 00
	Geo. W. Knight	November salary inst.	1350	250 00
	T. C. Smith	November salary inst.	1351	120 00
	A. H. Tuttle	November salary inst.	1352	100 00
	A. M. Bleile	November salary inst.	1353	225 00
	C. B. Morrey	November salary inst.	1354	120 00
	M. Dresbach	November salary inst.	1355	50 00
	W. C. Mills	November salary inst.	1356	40 00
	M. J. Kellenberger	November salary inst.	1357	25 00
	Mildred Waters	November salary inst.	1358	30 00

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1901				
Nov. 30	James Mitchell	November salary inst.	1359	40 00
	W. C. Weir	November salary inst.	1360	25 00
25	Lily Weeks	Salary	1361	6 00
30	Laura Hill	November salary inst.	1362	33 33
	R. M. Martin	November salary inst.	1363	20 00
	E. G. Bailey	November salary inst.	1364	18 00
	R. E. McIntosh	November salary inst.	1365	12 50
	H. H. Hamilton	November salary inst.	1366	12 50
	W. Townsell	November salary inst.	1367	25 00
	H. M. Templin	November salary inst.	1368	40 00
	Wm. Conklin	November salary inst.	1369	40 00
	M. N. Cook	November salary inst.	1370	40 00
	G. C. Denny	November salary inst.	1371	40 00
	H. Chantler	November salary inst.	1372	40 00
	W. Whitestine	November salary inst.	1373	40 00
	Wm. R. Thomas	November salary inst.	1374	40 00
	D. D. Geren	November salary inst.	1375	40 00
	John Brown	November salary inst.	1376	25 00
	John Brown	November salary inst.	1377	15 00
	F. E. Fleischer	November salary inst.	1378	40 00
	G. A. Goodspeed	November salary inst.	1379	40 00
	Ray Barton	November salary inst.	1380	20 00
	Chas. M. Hicks	November salary inst.	1381	45 00
	James Kelley	November salary inst.	1382	30 00
	Thos. E. Osburn	November salary inst.	1383	45 00
	John Ricketts	November salary inst.	1384	45 00
	Earl Kimmel	November salary inst.	1385	20 00
	Geo. R. Rose	November salary inst.	1386	70 00
	Marion Peck	November salary inst.	1387	45 00
	F. B. Brewer	November salary inst.	1388	50 00
	Thos. Boude	November salary inst.	1389	50 00
	Benj. LeBay	November salary inst.	1390	50 00
	W. H. Case	November salary inst.	1391	50 00
	Wm. Standley	November salary inst.	1392	58 33
	W. C. McCracken	November salary inst.	1393	150 00
	E. R. Hubler	November salary inst.	1394	33 33
	H. R. Powell	November salary inst.	1395	35 00
	E. D. Cockins	November salary inst.	1396	60 00
	K. H. Duncan	November salary inst.	1397	58 33
	W. O. Thompson	November salary inst.	1398	416 67
	M. T. Cook	November salary inst.	1399	30 00
	F. L. Landacre	November salary inst.	1400	100 00
	James S. Hine	November salary inst.	1401	100 00
	Herbert Osborn	November salary inst.	1402	225 00
	O. V. Brumley	November salary inst.	1403	75 00
	S. Sisson	November salary inst.	1404	150 00
	Paul Fischer	November salary inst.	1405	180 00
	D. S. White	November salary inst.	1406	180 00
	J. D. Batchelder	November salary inst.	1407	120 00
	Chas. A. Bruce	November salary inst.	1408	140 00
	B. L. Bowen	November salary inst.	1409	225 00
	Frank C. McKinney	November salary inst.	1410	30 00
	Clara C. Ewalt	November salary inst.	1411	30 00
	Anna E. Williams	November salary inst.	1412	30 00
	H. C. Allen	November salary inst.	1413	120 00
	G. H. McKnight	November salary inst.	1414	120 00
	W. L. Graves	November salary inst.	1415	120 00
	J. V. Denney	November salary inst.	1416	225 00

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1901				
Nov. 30	H. B. Brooks	November salary inst	1417	25 00
	F. E. Kester	November salary inst	1418	90 00
	A. D. Cole	November salary inst	1419	190 00
	B. F. Thomas	November salary inst	1420	225 00
	D. C. Huddleson	November salary inst	1421	50 00
	C. M. Berryman	November salary inst	1422	75 00
	C. P. Linhart	November salary inst	1423	160 00
	A. E. Davies	November salary inst	1424	90 00
	T. H. Haines	November salary inst	1425	120 00
	W. H. Scott	November salary inst	1426	225 00
	C. A. Dye	November salary inst	1427	100 00
	G. B. Kauffman	November salary inst	1428	200 00
	F. A. Ray	November salary inst	1429	200 00
	Gustav Bruder	November salary inst	1430	20 00
	A. D. Sproat	November salary inst	1431	25 00
	E. E. Somermeier	November salary inst	1432	100 00
	N. W. Lord	November salary inst	1433	200 00
	A. F. Hall	November salary inst	1434	66 66
	Geo. W. Frost	November salary inst	1435	60 00
	E. A. Hitchcock	November salary inst	1436	175 00
	W. T. Magruder	November salary inst	1437	225 00
	K. D. Swartzel	November salary inst	1438	120 00
	J. F. Travis	November salary inst	1439	30 00
	S. E. Rasor	November salary inst	1440	90 00
	H. W. Kuhn	November salary inst	1441	100 00
	C. E. Arnold	November salary inst	1442	120 00
	J. E. Boyd	November salary inst	1443	150 00
	Geo. W. McCoard	November salary inst	1444	160 00
	R. D. Bohannon	November salary inst	1445	225 00
	Elizabeth Smythe	November salary inst	1446	40 00
	C. B. Sayre	November salary inst	1447	20 00
	C. B. Guittard	November salary inst	1448	55 00
	Maude Jeffrey	November salary inst	1449	55 00
	Gertrude Kellicott	November salary inst	1450	55 00
	Harriet Townshend	November salary inst	1451	55 00
	F. A. Bohn	November salary inst	1452	50 00
	Olive Jones	November salary inst	1453	135 00
	J. M. Butler	November salary inst	1454	35 00
	E. O. Randall	November salary inst	1455	70 00
	W. H. Page	November salary inst	1456	180 00
	E. B. Kinkead	November salary inst	1457	120 00
	J. A. Shauck	November salary inst	1458	50 00
	J. H. Collins	November salary inst	1459	20 00
	W. F. Hunter	November salary inst	1460	250 00
	S. C. Derby	November salary inst	1461	225 00
	C. S. Van Dyke	November salary inst	1462	30 00
	C. P. Crowe	November salary inst	1463	100 00
	W. H. Renck	November salary inst	1464	100 00
	W. A. Knight	November salary inst	1465	120 00
	F. E. Sanborn	November salary inst	1466	200 00
	Vernon H. Davis	November salary inst	1467	62 50
	W. R. Lazenby	November salary inst	1468	225 00
	W. S. Elden	November salary inst	1469	120 00
	A. W. Hodgman	November salary inst	1470	140 00
	J. R. Smith	November salary inst	1471	225 00
	B. A. Eisenlohr	November salary inst	1472	80 00
	C. W. Mesloh	November salary inst	1473	140 00
	E. A. Eggers	November salary inst	1474	225 00

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1901				
Nov. 30	J. A. Bownocker	November salary inst.	1475	150 00
	C. S. Prosser	November salary inst.	1476	180 00
	W. H. Siebert	November salary inst.	1477	160 00
	J. R. Taylor	November salary inst.	1478	140 00
	A. C. Barrows	November salary inst.	1479	225 00
	J. P. Covan	November salary inst.	1480	80 00
	R. D. De Wolf	November salary inst.	1481	30 00
	F. A. Fish	November salary inst.	1482	100 00
	F. C. Caldwell	November salary inst.	1483	180 00
	D. R. Major	November salary inst.	1484	150 00
	Grace Pitts	November salary inst.	1485	30 00
	J. E. Hagerty	November salary inst.	1486	110 00
	J. R. Chamberlain	November salary inst.	1487	30 00
	J. H. Vosskuehler	November salary inst.	1488	100 00
	Silas Martin	November salary inst.	1489	100 00
	Thos. K. Lewis	November salary inst.	1490	100 00
	Thos. E. French	November salary inst.	1491	140 00
	J. N. Bradford	November salary inst.	1492	200 00
	C. P. Souther	November salary inst.	1493	120 00
	Minnie A. Stoner	November salary inst.	1494	180 00
	A. V. Bleininger	November salary inst.	1495	100 00
	Edward Orton, Jr.	November salary inst.	1496	200 00
	R. W. Funk	November salary inst.	1497	45 00
	E. E. Harrold	November salary inst.	1498	85 00
	W. L. Davies	November salary inst.	1499	50 00
	C. E. Sherman	November salary inst.	1500	140 00
	C. N. Brown	November salary inst.	1501	225 00
	H. T. Hance	November salary inst.	1502	30 00
	W. L. Dubois	November salary inst.	1503	30 00
	C. P. Linville	November salary inst.	1504	30 00
	C. W. Foulk	November salary inst.	1505	110 00
	W. E. Henderson	November salary inst.	1506	140 00
	Wm. McPherson	November salary inst.	1507	225 00
	S. A. Norton	November salary inst.	1508	125 00
	O. E. Jennings	November salary inst.	1509	45 00
	F. J. Tyler	November salary inst.	1510	25 00
	Elma B. Perry	November salary inst.	1511	25 00
	J. C. Bridwell	November salary inst.	1512	25 00
	J. H. Schaffner	November salary inst.	1513	120 00
	W. A. Kellerman	November salary inst.	1514	225 00
	C. G. Conley	November salary inst.	1515	30 00
	H. C. Lord	November salary inst.	1516	225 00
	Sarah Barrows	Sept. Oct. and Nov salary inst	1517	45 00
23	C. H. Woodruff	November salary	1518	65 00
26	F. C. Clark	Expenses	1519	1 47
	Hayden-Clinton Nation'l Bank	Interest due 12-1-1901	1520	4,575 00
	L. F. Kiesewetter, Treas	Payment of bonds and interest, U. S. Mortgage and Trust Co.	1521	26,687 50
	The Ohio Nat'l Bank	Interest on bonds	1522	900 00
29	L. B. Wing	Expenses	1523	3 85
30	Wilbur Sample	Labor on boiler	1524	9 00
	Geo. McClintock	Labor on boiler	1525	9 00
	Hardin Blaney	Labor	1526	9 00
	Wm. Carney	Labor	1527	7 50
	George Dickson	Labor	1528	3 00

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1901				
Nov. 30	Hayden-Clinton Nation'l Bank	Bonds due Dec. 1, 1901	1529	30,000 00
Dec. 2	R. M. Rownd, P. M.	Postage stamps	1530	30 00
	Lily Weeks	Salary	1531	6 00
4	F. C. Caldwell	Petty cash items	1532	4 51
6	H. O. Buman	Student labor	1533	2 37
	Thomas Beer	Hauling water	1534	6 52
	Wakeman C. Bell	Guide service	1535	1 00
	C. P. Burkey	Labor	1536	9 45
	E. G. Bailey	Erecting lockers	1537	3 60
	H. Brown	Anatomy-horses	1538	35 00
	Nelson Beaver	Carpenter work	1539	41 65
	Frank Cavin	Student labor	1540	11 38
	Thos. O. Cappell	Carpenter work	1541	36 40
	M. Dresbach	Supplies	1542	4 78
	W. Stillman Dutton	Architects fees	1543	179 08
	E. J. Deckman	Drawing	1544	4 06
	C. R. Dilts	Student labor	1545	7 15
	Oliver Dunlap	Carpenter work	1546	41 30
	Gideon A. Day	Carpenter work	1547	45 50
	William Esker	Carpenter work	1548	34 30
	Geo. Feick	Estimate No. 5, law bldg.	1549	7,163 20
	L. W. Funk	Student labor	1550	18 60
	H. J. A. Gerard	Guide service	1551	2 25
	Joe Garretson	Labor	1552	6 25
	Wm. W. Hackney	Student labor	1553	3 07
	Thomas F. Hunt	Expenses to Washington	1554	37 50
	W. A. Hite	Library work	1555	7 40
	Eva Harrington	Work in library	1556	1 90
	A. L. Harrington	Wiring hospital	1557	2 00
	C. L. Henderson	Student labor	1558	21 00
	W. A. Kellerman	Dept. supplies	1559	9 50
	W. F. Kern	Laboratory assistance	1560	4 80
	Jessie Karns	Stenographer	1561	16 00
	Harry Kinnear	Wiring	1562	50 63
	F. R. Kunkle	Student labor	1563	31 40
	Frank C. Long	Guide service	1564	8 00
	W. Morelan	Carpenter work	1565	17 15
	R. H. Minton	Student labor	1566	3 75
	R. E. McIntosh	Wiring	1567	22 87
	Allena Mitzenberg	Work in library	1568	8 10
	John McAllister	Labor	1569	35 00
	Ora F. Metz	Janitor work	1570	14 85
	R. H. Minton	Student labor	1571	50
	W. C. Mills	Stamps	1572	4 00
	O. S. U., Y. M. C. A.	Advertisement	1573	5 00
	Edward Orton, Jr.	Money advanced	1574	20 75
	Richard Peckham	Carpenter work	1575	22 40
	B. C. Parrett	Laboratory assistance	1576	2 70
	H. M. Plum	Laboratory assistance	1577	5 44
	Charles Pixler	Wheeling coal	1578	40 50
	C. C. Poindexter	Labor	1579	6 88
	W. H. Palmer	Work in museum	1580	2 50
	J. H. Randall	Carpenter work	1581	61 95
	Jno. A. Schneider	Carpenter work	1582	62 30
	Elmer Stevens	Carpenter work	1583	40 95
	Sarah A. Siebert	Money advanced	1584	30 11
	Edith Seymour	Music at gymnasium	1585	10 50

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1901				
Dec. 6	Mae Schaff	Library work	1586	7 10
	Geo. W. Sheetz	Library work	1587	5 30
	J. A. Stiver	Guide service	1588	10 13
	Frank Schwab	Student labor	1589	4 95
	L. M. Smith	Student labor	1590	5 00
	Carl E. Steeb	Notary work	1591	2 25
	Theo. H. Tangemann	Library work	1592	10 00
	Roy W. Thompson	Student labor	1593	15 05
	D. S. White	Supplies	1594	13 69
	E. N. Webb	Laboratory work	1595	4 95
	E. Wallace	Student labor	1596	16 65
	H. E. Williams	Student labor	1597	6 45
	West & Thompson	Books	1598	177 71
	Am. Sewer Pipe Co.	Pipe, etc.	1599	9 56
	Bowden Towel Supply Co.	Towel service	1600	2 50
	Bonnet & Ross Co.	Clock repairing	1601	2 50
	D. O. Beggs Co.	Matting	1602	5 00
	H. Braun Sons & Co	Supplies	1603	62 98
	Blackwood, Green & Co.	Hardware, etc.	1604	63 51
	Corbett & Jones	Tables	1605	3 50
	Col's Show Case W'ks.	Cases	1606	293 00
	Col's Mdse Co.	Merchandise	1607	2 54
	Col's Sporting Goods Co	Strike bag and bladder	1608	8 85
	Col's M. & M. Supply Co.	Leather	1609	1 00
	Jas. P. Carlile	Cement and plaster	1610	8 15
	Chas. M. Cott	Printing	1611	9 15
	Central Ohio Paper Co.	Paper and caps	1612	13 75
	Champion Prtg Co	Printing	1613	141 00
	The H. Cole Co.	Tracing cloth	1614	9 70
	Geo. D. Cross Lumber Co.	Lumber	1615	132 65
	Col's Supply Co.	Supplies	1616	384 73
	E. Doddington & Co.	Lumber	1617	6 50
	Engelke & Bigelow	Freight and cartage	1618	122 19
	Electric Supply and Construction Co.	Electric supplies	1619	47 39
	The Erner Hopkins Co.	Supplies	1620	52 05
	A. F. Fenstemaker	Finishing desks	1621	25 50
	H. L. Fishback & Co.	Baskets	1622	4 50
	The Griswold-Sohl Co.	Iron	1623	21 48
	The Hasbrook Barger Co	Bowls	1624	12 50
	Harrington & Nonnemacher	Repairing clock	1625	75
	The Hall Collins Co	Hardware	1626	2 70
	Hart & Crouse	Furnace repairs	1627	3 69
	Andrew Kaiser	Reservoirs	1628	4 50
	Kauffman Lattimer Co.	Drugs and sundries	1629	182 81
	Kelton & Converse	Lumber	1630	115 34
	The Laning Co.	Reports	1631	3 60
	Oscar S. Lear	Supplies	1632	2 10
	Murray City Coal Co.	Coal	1633	1,318 00
	J. W. Meek & Co.	Repairing balls	1634	1 25
	M. V. Mitchell & Son	Slabs for switchboard	1635	19 00
	J. S. Maclean	Oak case	1636	14 50
	McClelland & Co.	Neostyle paper	1637	1 35
	W. H. Miller & Co.	Packing, etc.	1638	3 73
	Nitschke Bros.	Printing	1639	68 20

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1901				
Dec. 6	Ohio Furniture Co.....	Case	1640	20 00
	James Penn	Hauling and feed.....	1641	19 95
	Payne McDonald Hardware Co.	Hardware	1642	30 78
	The Ruggles Gale Co...	Treas. cash account.....	1643	9 00
	Schroth & Potter	Window shades	1644	15 75
	Seraphim Blank Book Co.	Binding	1645	69 20
	Spahr & Glenn	Printing	1646	43 25
	A. H. Smythe	Office supplies	1647	7 38
	Schoedinger, Fearn & Co.	Hardware	1648	10 78
	Standard Oil Co.	Oil and gasoline.....	1649	34 42
	Tracy, Wells & Co.....	Merchandise	1650	10 28
	Tallmadge Hardware Co.	Hardware	1651	44 75
	Water Department	Water connections	1652	121 42
	Z. L. White & Co.....	Cheese cloth	1653	2 75
	P. F. Yoerger.....	Lettering on doors.....	1654	3 50
	Am. Arch. and Building News Co.	Book	1655	7 50
	D. Appleton & Co.....	Book	1656	5 00
	W. H. Anderson & Co...	Reports	1657	8 00
	Art Collectors' Club....	Set pictures	1658	3 00
	Milton-Bradley Co.	Spectrum and paper.....	1659	1 53
	John S. Bushnell Co....	Repairing wheels	1660	7 15
	The Boston Book Co...	Books	1661	53 00
	The Burrows Bros. Co..	Dictionaries	1662	13 76
	Brown & Sharpe Mfg. Co.	Plate and cutters.....	1663	20 16
	Banking Law Journal..	Copies of Journal.....	1664	3 90
	Bausch & Lomb Opt. Co.	Apparatus	1665	232 40
	Babcock & Wilcox Co..	Part payment on boiler and stoker	1666	1,526 00
	Wm. B. Dana Co.....	Chronicles	1667	5 60
	Chicago Lab. Supply and Scale Co.	Tubes	1668	1 85
	Crosby Steam Gauge and Valve Co.	Repairing	1669	16 75
	G. N. Cloman, Treas....	Membership fee	1670	3 00
	Charity Organization Society	Charities review	1671	20 00
	Jos. Dyson & Son.....	Forgings	1672	33 19
	Eimer & Amend.....	Supplies	1673	29 50
	Genl. Apparatus Chem. Co.	Supplies	1674	43 57
	The Hunnewell Soap Co.	Soap	1675	5 25
	C. Hennecke Co.....	Models	1676	26 25
	Homestead Valve Mfg. Co.	Valves	1677	28 80
	Illinois Society for Child Study	Transactions	1678	3 50
	The Independent	Independent	1679	1 35
	H. Kohnstamm & Co....	Hard felt	1680	2 70
	Knauth, Nachod & Kuhne	Acct. of Otto Harassowitz..	1681	2 49
	The Lunkenheimer Co..	Valves	1682	8 75
	P. M. Lincoln.....	Synchronizer	1683	45 00
	Library Bureau	Supplies	1684	14 36

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1901				
Dec. 6	The Fred Macey Co.....	Boxes and sections.....	1685	41 90
	The Mfgs. Governor Co.	Governors and valve.....	1686	43 77
	Milligan Hardware and S. Co.	Brass cloth	1687	25 75
	E. H. Sargent Co.....	Supplies	1688	31 35
	Statute Law Book Co..	Documents	1689	21 00
	Stanley Electric Mfg. Co.	Ohmmeter	1690	64 00
	J. Roland Storey.....	Storey's Quarterly	1691	1 00
	G. E. Stechert.....	Books	1692	128 41
	Henry Troemner	Balances, etc.	1693	202 75
	Edward Thompson Co...	Law Encyclopedia	1694	6 00
	Josephine E. Tilden....	American Algæ.....	1695	20 00
	Williams, Brown & Earle	Stereopticon outfit	1696	44 70
	H. W. Wilson, Pub.....	Indexes	1697	10 00
	Webb Sta. and Ptg. Co.	Numbering machine	1698	9 00
	Columbus Brass Co.....	Tee and ell	1699	75
	W. T. Atherton.....	Campus work	1700	6 75
	Nelson Beaver	Campus work	1701	7 00
	C. A. Bickman.....	Campus work	1702	2 91
	W. T. Clevenger.....	Campus work	1703	8 56
	Thomas O. Cappell.....	Carpenter work	1704	52 25
	J. F. Coe.....	Campus work	1705	7 50
	C. Curtis	Campus work	1706	1 12
	H. C. DeLong.....	Campus work	1707	5 62
	R. C. Doneghue	Campus work	1708	1 18
	Gideon H. Day.....	Carpenter work	1709	8 75
	C. A. DeMuth.....	Campus work	1710	1 06
	G. C. DeLong.....	Campus work	1711	4 37
	William Esker	Carpenter work	1712	5 60
	E. E. Finney.....	Campus work	1713	2 34
	J. A. Frederick.....	Campus work	1714	1 93
	Wm. Fields	Campus work	1715	3 00
	W. D. Griffith.....	Campus work	1716	33 30
	H. H. Graver.....	Campus work	1717	8 75
	Geo. S. Heasley.....	Campus work	1718	1 18
	J. R. Haywood.....	Campus work	1719	1 18
	Carl Hagerman	Campus work	1720	3 93
	J. R. Johnson.....	Campus work	1721	13 50
	Wm. A. Jones.....	Campus work	1722	6 00
	G. A. Lipp.....	Campus work	1723	1 18
	Burt Muskimen	Campus work	1724	1 52
	J. F. Prahl.....	Campus work	1725	2 12
	Richard Peckham	Carpenter work	1726	34 65
	J. H. Randall.....	Carpenter work	1727	10 85
	G. Rogers	Campus work	1728	1 75
	John A. Schneider.....	Carpenter work	1729	8 75
	Elmer Stevens	Carpenter work	1730	7 35
	L. I. Skidmore.....	Campus work	1731	1 12
	H. P. Snow.....	Campus work	1732	3 00
	G. O. Thompson.....	Campus work	1733	2 31
	E. D. Waid.....	Campus work	1734	1 00
	Herman Weber	Campus work	1735	19 50
	G. B. White.....	Campus work	1736	2 50
	Hall-Collins Hardware Co.	Cow ties	1737	3 88
	Nitschke Bros.	Envelopes	1738	5 50

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1901				
Dec. 6	Chas. J. Palmer	Zinc and labor	1739	3 20
	Armour Fertilizer Co	B. Blood	1740	2 25
	D. H. Burrell & Co	Rennet extract	1741	3 75
	Star Milk Cooler Co	Cooler	1742	20 70
	Henry Troemner	Cream scale	1743	8 00
	Columbus Gas Co	November gas	1744	186 45
	Cent. Union Telephone Co.	December rental and toll	1745	5 45
	W. U. Telegraph Co	Telegrams	1746	2 91
7	W. E. Severn	Fees veterinary clinic	1747	8 70
9	Olive Jones	December salary	1748	135 00
	Am. Jersey Cattle Club	8 volumes Herd Register	1749	8 00
	Lily Weeks	Salary	1750	6 00
10	Mary Shanahan	Laundry demonstration	1751	23 71
11	H. C. Allen	December salary inst	1752	120 00
	Alexis Cope	December salary inst	1753	187 50
	Carl E. Steeb	December salary inst	1754	75 00
	Clara M. Berryman	December salary inst	1755	75 00
	Lily Weeks	Bal. salary	1756	3 00
12	Wm. Carney	Labor	1757	12 45
	Hardin Blaney	Labor	1758	10 95
17	Thomas F. Hunt	December salary inst	1759	250 00
16	W. D. Gibbs	December salary inst	1760	175 00
13	John W. Decker	December salary inst	1761	160 00
18	Frank Ruhlen	December salary inst	1762	75 00
16	H. A. Weber	December salary inst	1763	225 00
23	A. E. Vinson	December salary inst	1764	90 00
16	Rudolph Hirsch	December salary inst	1765	30 00
18	Geo. W. Knight	December salary inst	1766	250 00
23	T. C. Smith	December salary inst	1767	120 00
16	A. H. Tuttle	December salary inst	1768	100 00
23	A. M. Bleile	December salary inst	1769	225 00
13	C. B. Morrey	December salary inst	1770	120 00
14	M. Dresbach	December salary inst	1771	50 00
17	W. C. Mills	December salary inst	1772	40 00
23	H. C. Lord	December salary inst	1773	225 00
14	C. G. Conley	December salary inst	1774	30 00
	W. A. Kellerman	December salary inst	1775	225 00
	J. H. Schaffner	December salary inst	1776	120 00
18	J. C. Bridwell	December salary inst	1777	25 00
16	Elma B. Perry	December salary inst	1778	25 00
13	F. J. Tyler	December salary inst	1779	25 00
	O. E. Jennings	December salary inst	1780	45 00
17	S. A. Norton	December salary inst	1781	125 00
	Wm. McPherson	December salary inst	1782	225 00
14	W. E. Henderson	December salary inst	1783	140 00
20	C. W. Foulk	December salary inst	1784	110 00
16	C. P. Linville	December salary inst	1785	30 00
	W. L. Dubois	December salary inst	1786	30 00
17	H. T. Hance	December salary inst	1787	30 00
20	C. N. Brown	December salary inst	1788	225 00
	C. E. Sherman	December salary inst	1789	140 00
18	W. L. Davies	December salary inst	1790	50 00
	E. E. Harrold	December salary inst	1791	85 00
	R. W. Funk	December salary inst	1792	45 00
23	Edward Orton, Jr	December salary inst	1793	200 00
20	A. V. Bleininger	December salary inst	1794	100 00
13	Minnie A. Stoner	December salary inst	1795	180 00

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1901				
Dec. 13	C. P. Souther	December salary inst	1796	120 00
	J. N. Bradford	December salary inst	1797	200 00
18	Thos. E. French	December salary inst	1798	140 00
	Thos. K. Lewis	December salary inst	1799	100 00
	Silas Martin	December salary inst	1800	100 00
17	J. H. Vosskuehler	December salary inst	1801	100 00
	J. R. Chamberlain	December salary inst	1802	30 00
14	F. C. Clark	December salary inst	1803	200 00
16	J. E. Hagerty	December salary inst	1804	110 00
	Grace Pitts	December salary inst	1805	30 00
23	D. R. Major	December salary inst	1806	150 00
	F. C. Caldwell	December salary inst	1807	180 00
	F. A. Fish	December salary inst	1808	100 00
	R. D. DeWolf	December salary inst	1809	30 00
	J. P. Covan	December salary inst	1810	80 00
	A. C. Barrows	December salary inst	1811	225 00
20	J. R. Taylor	December salary inst	1812	140 00
16	W. H. Siebert	December salary inst	1813	160 00
17	Chas. S. Prosser	December salary inst	1814	180 00
	J. A. Bownocker	December salary inst	1815	150 00
13	E. A. Eggers	December salary inst	1816	225 00
17	C. W. Mesloh	December salary inst	1817	140 00
18	B. A. Eisenlohr	December salary inst	1818	80 00
	J. R. Smith	December salary inst	1819	225 00
16	A. W. Hodgman	December salary inst	1820	140 00
17	W. S. Elden	December salary inst	1821	120 00
23	W. R. Lazenby	December salary inst	1822	225 00
16	V. H. Davis	December salary inst	1823	62 50
	F. E. Sanborn	December salary inst	1824	200 00
	W. A. Knight	December salary inst	1825	120 00
	W. H. Renck	December salary inst	1826	100 00
	C. P. Crowe	December salary inst	1827	100 00
17	C. S. VanDyke	December salary inst	1828	30 00
	S. C. Derby	December salary inst	1829	225 00
18	W. F. Hunter	December salary inst	1830	250 00
23	J. H. Collins	December salary inst	1831	20 00
	J. A. Shauck	December salary inst	1832	50 00
	E. B. Kinkead	December salary inst	1833	120 00
17	W. H. Page	December salary inst	1834	180 00
23	E. O. Randall	December salary inst	1835	70 00
	J. M. Butler	December salary inst	1836	35 00
14	F. A. Bohn	December salary inst	1837	50 00
	Harriet N. Townshend	December salary inst	1838	55 00
18	Gertrude S. Kellicott	December salary inst	1839	55 00
	Maude D. Jeffrey	December salary inst	1840	55 00
	C. B. Guittard	December salary inst	1841	55 00
17	Chas. B. Sayre	December salary inst	1842	20 00
18	Elizabeth Smythe	December salary inst	1843	40 00
	R. D. Bohannon	December salary inst	1844	225 00
14	Geo. W. McCoard	December salary inst	1845	160 00
18	J. E. Boyd	December salary inst	1846	150 00
16	C. E. Arnold	December salary inst	1847	120 00
17	H. W. Kuhn	December salary inst	1848	100 00
14	S. E. Rasor	December salary inst	1849	90 00
16	J. F. Travis	December salary inst	1850	30 00
17	K. D. Swartzell	December salary inst	1851	120 00
20	W. T. Magruder	December salary inst	1852	225 00
	E. A. Hitchcock	December salary inst	1853	165 00

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1901				
Dec. 23	Geo. W. Frost	December salary inst	1854	60 00
19	A. F. Hall	December salary inst	1855	66 66
23	N. W. Lord	December salary inst	1856	200 00
17	E. E. Somermier	December salary inst	1857	100 00
18	A. D. Sproat	December salary inst	1858	25 00
	Gustav Bruder	December salary inst	1859	20 00
18	Frank A. Ray	December salary inst	1860	200 00
19	Geo. B. Kauffman	December salary inst	1861	200 00
	C. A. Dye	December salary inst	1862	100 00
17	W. H. Scott	December salary inst	1863	225 00
23	T. Harvey Haines	December salary inst	1864	120 00
	A. E. Davies	December salary inst	1865	90 00
17	C. P. Linhart	December salary inst	1866	160 00
18	D. C. Huddleson	December salary inst	1867	50 00
	B. F. Thomas	December salary inst	1868	225 00
	A. D. Cole	December salary inst	1869	190 00
14	F. E. Kester	December salary inst	1870	90 00
18	H. B. Brooks	December salary inst	1871	25 00
19	J. V. Denney	December salary inst	1872	225 00
18	W. L. Graves	December salary inst	1873	120 00
17	G. H. McKnight	December salary inst	1874	120 00
25	H. C. Allen	December salary inst	1875	120 00
18	Anna Williams	December salary inst	1876	30 00
	Clara C. Ewalt	December salary inst	1877	30 00
	Frank C. McKinney	December salary inst	1878	30 00
17	B. L. Bowen	December salary inst	1879	225 00
18	C. A. Bruce	December salary inst	1880	140 00
	J. D. Batchelder	December salary inst	1881	120 00
	D. S. White	December salary inst	1882	180 00
	Paul Fischer	December salary inst	1883	180 00
17	S. Sisson	December salary inst	1884	150 00
	O. V. Brumley	December salary inst	1885	75 00
	Herbert Osborn	December salary inst	1886	225 00
17	Jas. S. Hine	December salary inst	1887	100 00
	F. L. Landacre	December salary inst	1888	100 00
18	M. T. Cook	December salary inst	1889	30 00
	W. O. Thompson	December salary inst	1890	416 67
17	K. H. Duncan	December salary inst	1891	58 33
	E. D. Cockins	December salary inst	1892	60 00
	H. R. Powell	December salary inst	1893	35 00
19	E. R. Hubler	December salary inst	1894	33 33
20	W. C. McCracken	December salary inst	1895	150 00
	Wm. Standley	December salary inst	1896	58 33
	W. H. Case	December salary inst	1897	50 00
	Benj. LeBay	December salary inst	1898	50 00
	Thos. Boude	December salary inst	1899	50 00
	Fred B. Brewer	December salary inst	1900	50 00
	Marion Peck	December salary inst	1901	45 00
18	Geo. R. Rose	December salary inst	1902	70 00
20	Earl Kimmel	December salary inst	1903	20 00
	John Ricketts	December salary inst	1904	45 00
	Thos. E. Osburn	December salary inst	1905	45 00
	James Kelley	December salary inst	1906	30 00
	Chas. W. Hicks	December salary inst	1907	45 00
	Ray Barton	December salary inst	1908	20 00
	G. A. Goodspeed	December salary inst	1909	40 00
	F. E. Fleischer	December salary inst	1910	40 00
	John Brown	December salary inst	1911	25 00

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1901				
Dec. 20	John Brown	December salary inst	1912	15 00
23	J. K. Pritner	December salary inst	1913	40 00
20	Wm. R. Thomas	December salary inst	1914	40 00
23	Wm. Whitestine	December salary inst	1915	40 00
20	H. Chantler	December salary inst	1916	40 00
	G. C. Denny	December salary inst	1917	40 00
23	M. N. Cook	December salary inst	1918	40 00
	Wm. C. Conklin	December salary inst	1919	40 00
17	H. M. Templin	December salary inst	1920	40 00
23	W. Townsell	December salary inst	1921	25 00
	H. H. Hamilton	December salary inst	1922	12 50
18	R. E. McIntosh	December salary inst	1923	12 50
20	E. G. Bailey	December salary inst	1924	18 00
23	R. M. Martin	December salary inst	1925	20 00
19	Laurel Hill	December salary inst	1926	33 33
	C. H. Woodruff	December salary inst	1927	65 00
23	W. C. Weir	December salary inst	1928	25 00
20	James Mitchell	December salary inst	1929	40 00
	Mildred Waters	December salary inst	1930	30 00
	Sarah Barrows	December salary inst	1931	15 00
	M. J. Kellenberger	December salary inst	1932	25 00
13	W. H. Palmer	Student labor	1933	1 38
	Geo. Dickson	Labor	1934	13 20
	Alma H. Wacker	Assistance in gymnasium	1935	16 66
16	F. R. Kunkle	Student labor	1936	8 30
	R. D. DeWolf	Quiz work	1937	8 00
17	Harry Kinnear	Student labor; wiring	1938	27 00
	Ohio National Bank	Money order to Hayez, Belgium	1939	5 15
	J. H. Tillman	Guide service	1940	1 00
18	J. E. Bender	Proceeds veterinary clinic	1941	26 31
	Wm. Whitestine	Squirrel money	1942	5 00
	F. A. Fish	Quiz work	1943	9 00
19	John T. Mack	Expenses as trustee	1944	18 20
20	H. G. Weinland	Student labor	1945	4 81
23	Hardin Blaney	Labor	1946	10 50
	L. C. Ferrell, Supt. of Documents	Book	1947	3 50
1902				
Jan. 1	D. M. Massie	Expenses as trustee, Aug. 2, 1901, to date	1948	28 60
4	Hardin Blaney	Work on trench	1949	12 75
6	Alexis Cope	January salary	1950	187 50
Jan. 6	Carl Shoemaker	Services in band	1951	5 00
	C. A. McGrew	Services in band	1952	5 00
	Lily Weeks	Janitress work	1953	3 00
Jan. 7	J. G. Whetzel	Services as Q. Master	1954	5 00
Jan. 8	T. J. Godfrey	Expenses as trustee	1955	13 70
	Citizens Tel. Co.	Phone rental	1956	98 10
Jan. 10	Thomas Beers	Hauling water	1957	3 04
	N. L. Burner	Platinum	1958	45 00
	E. G. Bailey	Student labor	1959	6 68
	C. A. Bickham	Campus work	1960	1 31
	J. E. Bard	Student labor	1961	1 91
	J. N. Bradford	Slides	1962	10 50
	Bigelow & Thompson	Supplies	1963	1 43
	G. E. Cook	Labor	1964	1 50

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1902				
Jan. 10	C. Curtis	Campus work	1965	3 87
	W. L. Clevenger	Campus work	1966	2 81
	C. A. DeMuth	Campus work	1967	2 18
	Oliver Dunlap	Carpenter work	1968	7 00
	Grace Eagleson	Clerical work	1969	22 15
	L. W. Funk	Student labor	1970	14 25
	W. D. Griffith	Campus work	1971	38 40
	H. J. A. Gerard	Guide	1972	2 98
	Wm. Hackney	Labor	1973	83
	C. L. Henderson	Cleaning bones	1974	6 75
	W. E. Henderson	Crucible	1975	19 50
	Carl Hagerman	Campus work	1976	1 62
	Jessie B. Karns	Stenographer	1977	16 00
	W. A. Kellerman	Supplies	1978	12 53
	L. R. Lee	Campus work	1979	4 25
	The Lantern	Adv. and subscription	1980	58 34
	F. C. Long	Guide service	1981	3 50
	Max W. Morse	Museum work	1982	2 85
	W. Morelan	Carpenter work	1983	33 60
	Geo. McClintock	Labor	1984	34 50
	O. F. Metz	Janitor work	1985	24 00
	C. P. McClelland	Guide service	1986	3 00
	Wm. McPherson	Cash advanced	1987	7 93
	Wm. T. Magruder	Supplies	1988	3 00
	Ellsworth Ogden	Student labor	1989	10 40
	E. L. Orndorff	Laboratory work	1990	1 58
	J. F. Prahl	Campus work	1991	1 62
	Charles Pixler	Wheeling coal	1992	45 00
	F. J. Prince	Laboratory work	1993	2 10
	C. C. Poindexter	Student labor	1994	10 88
	J. H. Randall	Carpenter work	1995	52 50
	W. H. Renck	Pattern work	1996	7 00
	R. E. Rightmire	Student labor	1997	7 20
	Edith Seymour	Music in gymnasium	1998	4 50
	John A. Schneider	Carpenter work	1999	4 25
	Wilbur Sample	Labor	2000	36 00
	J. A. Stiver	Guide service	2001	19 50
	L. M. Smith	Student labor	2002	2 87
	Carl E. Steeb	Notary fees	2003	3 00
	Burr A. Waters	Student labor	2004	10 75
	H. E. Williams	Student labor	2005	9 75
	E. Wallace	Student labor	2006	25 20
	D. W. Witman	Laboratory work	2007	5 10
	Artura Photo Paper Co.	Paper	2008	4 95
	J. S. Abbott & Co.	Nails	2009	2 65
	Am. Dist. Tel. Co.	Night watch boxes	2010	87 00
	Acme Paving Co	Cement	2011	5 40
	H. Braun Sons & Co.	Supplies	2012	31 35
	Borger Bros. & Co.	Repairing boiler	2013	55 15
	Bucher Eng. and Mfg. Co.	Half-tone	2014	2 76
	Geo. S. Beall	Supplies	2015	3 23
	Blackwood, Green & Co.	Hardware and repairs	2016	89 74
	Bowden Towel Supply Co.	Towel service	2017	39 30
	Col's Mill and Mine Supply Co.	Hose	2018	26 51
	Col's Gas Co.	Coke	2019	26 93

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1902				
Jan. 10	E. L. Charles	Hauling	2020	3 25
	Col's Photo and Supply Co.	Supplies	2021	1 75
	Col's Sporting Goods Co.	Apparatus	2022	5 40
	G. W. Clarke & Co	Oak stakes	2023	12 50
	Columbus Brass Co.	Leather	2024	1 60
	Columbus Supply Co	Supplies	2025	125 95
	Champlin Ptg Co.	Printing	2026	25 25
	Geo. D. Cross Lumber Co	Lumber	2027	40 12
	Cherington Ptg. and Engraving Co.	Stamps	2028	11 50
	Capital City Mach. Wks.	Bolts, clamps, etc	2029	2 75
	E. Doddington & Co	Lumber	2030	216 47
	Engelke & Bigelow	Freight and cartage	2031	80 83
	Elec. Supply and Construction Co.	Insulators and cleats	2032	2 40
	Erner & Hopkins Co.	Electric supplies	2033	98 85
	Ferree & Son	Ice	2034	4 83
	Henry Goldsmith	Music	2035	7 80
	Green, Joyce & Co.	Crash	2036	3 40
	Griswold Sohl Co.	Tools and iron	2037	26 28
	J. C. Howard	Painting	2038	20 70
	The Hatton Pharmacy.	Supplies	2039	2 50
	Harrington & Nonnemacher	Repairs on timer	2040	2 00
	N. C. Hager	Groceries	2041	16 90
	Hall-Collins Hdw. Co.	Padlocks	2042	5 40
	Hann & Adair	Printing	2043	2 50
	Jeffrey Mfg. Co.	Paper	2044	1 80
	Kanffman-Lattimer & Co	Drugs and chemicals	2045	78 09
	The Kilbourne-Jones Co.	Parker vises and jaws	2046	41 00
	Krauss, Butler & Benham Co.	Shades	2047	5 40
	Kelton & Converse	Lumber	2048	245 44
	Lynas Bros.	Candles	2049	3 90
	C. E. Morris & Co	Iron work	2050	36 93
	J. W. Meek & Co	Canvas	2051	10 00
	McDonald & Steube	Metal polish	2052	1 50
	J. J. Marvin	Music stand	2053	3 00
	J. S. Maclean	Oak case	2054	23 50
	Murray City Coal Co.	Coal	2$55	1,341 20
	McAllister, Mohler & Co	Office chair	2056	9 00
	W. H. Miller & Co	Pipe, valves, etc.	2057	145 93
	Nitschke Bros.	Printing	2058	38 83
	Ohio Furniture Co.	Tile flooring	2059	48 00
	Chas. J. Palmer	Pipe and register	2060	8 00
	Ben. D. Potts	Supplies	2061	1 31
	James Penn	Hauling	2062	5 96
	Penna. Fuel Co.	Stone, etc.	2063	365 27
	W. H. Redhead	Supplies	2064	3 50
	Reeves Bros.	Lock hasps	2065	10 10
	A. H. Smythe	Files	2066	3 05
	Smith Premier Typewriter Co.	Repairs and ribbon	2067	8 25
	Standard Oil Co.	Oil	2068	33 67
	Seraphim Blank Book Co.	Binding	2069	72 40
	F.O. Schoedinger	Can and cups	2070	13 05

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1902				
Jan. 10	Schoedinger, Fearn & Co.	Supplies	2071	4 50
	M. P. Street	Brick work	2072	350 00
	Spahr & Glenn	Printing	2073	121 00
	Shilling Foundry Co.	Castings	2074	49 35
	Taylor, Williams & Co.	Coal	2075	160 72
	Tallmadge Hdw. Co.	Hardware	2076	85 27
	Vogelgesang Furnace Co	Furnace repairs	2077	2 55
	J. M. & W. Westwater.	Supplies	2078	5 30
	Z. L. White & Co.	Denim	2079	4 00
	W. H. Anderson & Co.	Law reports	2080	233 00
	Am. Philosophical Society	Transactions	2081	5 00
	Am. Steam Gauge Valve Co.	Gauge	2082	8 00
	P. Blakiston's Sons & Co.	Books	2083	1 80
	Babcock & Wilcox Co.	Boiler and stoker	2084	1,526 00
	Geo. F. Blake Mfg. Co.	H. R. Valves	2085	10 24
	Thos. Buchanan Co.	Carborundum	2086	2 00
	W. W. Beman	Journals	2087	16 75
	A. H. Barber Mfg. Co.	Machine supplies	2088	31 20
	Bausch & Lomb Opt. Co.	Knives	2089	5 00
	Central Electric Co.	Wire	2090	20 10
	Denver Fire Clay Co.	Crucibles	2091	25 38
	Julian D'Este & Co.	Copper float	2092	5 00
	Detroit Photographic Co	A. A. C. prints	2093	5 95
	The Engineer Magazine.	Index	2094	10 00
	Engineer News Pub. Co.	Proceedings	2095	2 00
	E. Bartholomew	Copy	2096	6 00
	Eimer & Amend	Supplies	2097	208 75
	Genl. Electric Co.	Generator, etc.	2098	382 62
	Genl. Apparatus and Chemical Co.	Supplies	2099	43 83
	Herman Haerlein	Professional services	2100	84 70
	W. D. Hoard	Advertisement	2101	25 00
	Hohman & Maurer Mfg. Co.	Apparatus	2102	15 00
	Bruno & Hessling.	Books	2103	30 50
	Hunnewell Soap Co.	Soap	2104	4 25
	C. W. Haines	Crate	2105	15 00
	India Alkali Works	Savogran	2106	17 62
	Jarecki Mfg. Co.	Radiator	2107	4 84
	Jones & Laughlins	Steel	2108	22 95
	Assn. of American Law Schools	Annual dues	2109	10 00
	The Lunkenheimer Co.	Machine supplies	2110	61 73
	W. H. Moore	World's Work	2111	2 65
	Merrett & Co.	Lockers	2112	103 20
	Modern Research Society	Encyclopedia	2113	5 00
	Munich Art Metallic Co.	Casts	2114	15 00
	The Fred. Macey Co.	Desk and chair	2115	25 80
	Nat'l Stockman and Farmer	Advertisement	2116	55 20
	Nernst Lamp Co.	Lamp, etc.	2117	6 00
	Nicholson File Co.	File handles	2118	4 03
	The Ohio Farmer	Advertisement	2119	76 10

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1902				
Jan. 10	Stumpf & Steurer	Pub. notice of bond sale	2120	32 00
	J. W. Spenceley	Book-plates	2121	7 50
	The L. S. Starrett Co.	H. S. blades	2122	1 75
	Chas. C. Smith	Index tags	2123	5 69
	Standard Tool Co.	Tools	2124	22 55
	G. E. Stechert	Books	2125	48 51
	Henry Troemner	Weights	2126	56 07
	Toledo Linseed Oil Wks.	Oil meal	2127	29 00
	E. B. Voorhees, secy.	Dues	2128	15 00
	Watertown Engine Co.	Pt. payment on engine	2129	1,500 00
	A. Wycoff & Son	Pipe cover	2130	249 50
	Webb Sta. and Ptg. Co.	Supplies	2131	11 35
	Westinghouse Electric and Mfg. Co.	Payment on generator etc.	2132	419 66
	The Yale & Towne Mfg. Co.	Trolley	2133	14 04
	Columbus Gas Co.	December gas	2134	213 00
	Bryson, Brubacher & Co.	Insurance premium	2135	68 74
	Lauterbach & Eilber	Insurance premium	2136	27 50
Jan. 11	Lily Weeks	Janitress work	2137	6 00
	Carl E. Steeb	January salary	2138	75 00
	J. E. Bender	Fees at veterinary clinic	2139	17 34
Jan. 15	Central Union Tel. Co.	January rental	2140	5 00
Jan. 20	Col's St. Ry. Co.	Car tickets	2141	5 00
	Lily Weeks	Salary	2142	6 00
Jan. 25	Thos. F. Hunt	January salary inst.	2143	250 00
	M. F. Miller	January salary inst.	2144	80 00
	F. E. Hamilton	January salary inst.	2145	50 00
	John W. Decker	January salary inst.	2146	160 00
	Frank Ruhlen	January salary inst.	2147	75 00
	B. B. Herrick	January salary inst.	2148	50 00
	D. A. Crowner	January salary inst.	2149	66 66
	H. A. Weber	January salary inst.	2150	225 00
	A. E. Vinson	January salary inst.	2151	90 00
	Rudolph Hirsch	January salary inst.	2152	30 00
	Geo. W. Knight	January salary inst.	2153	250 00
	T. C. Smith	January salary inst.	2154	120 00
	A. H. Tuttle	January salary inst.	2155	100 00
	A. M. Bleile	January salary inst.	2156	225 00
	C. B. Morrey	January salary inst.	2157	120 00
	M. Dresbach	January salary inst.	2158	50 00
	W. C. Mills	January salary inst.	2159	40 00
	H. C. Lord	January salary inst.	2160	225 00
	C. G. Conley	January salary inst.	2161	30 00
	W. A. Kellerman	January salary inst.	2162	225 00
	J. H. Schaffner	January salary inst.	2163	120 00
	J. C. Bridwell	January salary inst.	2164	25 00
	Elma B. Perry	January salary inst.	2165	25 00
	F. J. Tyler	January salary inst.	2166	25 00
	O. E. Jennings	January salary inst.	2167	45 00
	S. A. Norton	January salary inst.	2168	125 00
	Wm. McPherson	January salary inst.	2169	225 00
	W. E. Henderson	January salary inst.	2170	140 00
	C. W. Foulk	January salary inst.	2171	110 00
	C. P. Linville	January salary inst.	2172	30 00
	W. L. Dubois	January salary inst.	2173	30 00

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1902				
Jan. 25	H. T. Hance	January salary inst	2174	30 00
	C. N. Brown	January salary inst	2175	225 00
	C. E. Sherman	January salary inst	2176	140 00
	W. L. Davies	January salary inst	2177	50 00
	E. E. Harrold	January salary inst	2178	85 00
	R. W. Funk	January salary inst	2179	45 00
	Edward Orton, Jr.	January salary inst	2180	200 00
	A. V. Bleininger	January salary inst	2181	100 00
	M. A. Stoner	January salary inst	2182	180 00
	C. P. Souther	January salary inst	2183	120 00
	J. N. Bradford	January salary inst	2184	200 00
	Thos. E. French	January salary inst	2185	140 00
	Thos. K. Lewis	January salary inst	2186	100 00
	Silas Martin	January salary inst	2187	100 00
	J. H. Vosskuehler	January salary inst	2188	100 00
	J. R. Chamberlain	January salary inst	2189	30 00
	F. C. Clark	January salary inst	2190	200 00
	J. E. Hagerty	January salary inst	2191	110 00
	Grace Pitts	January salary inst	2192	30 00
	D. R. Major	January salary inst	2193	150 00
	F. C. Caldwell	January salary inst	2194	180 00
	F. A. Fish	January salary inst	2195	100 00
	R. D. DeWolf	January salary inst	2196	30 00
	J. P. Covan	January salary inst	2197	80 00
	A. C. Barrows	January salary inst	2198	225 00
	J. R. Taylor	January salary inst	2199	140 00
	W. H. Siebert	January salary inst	2200	160 00
	C. S. Prosser	January salary inst	2201	180 00
	J. A. Bownocker	January salary inst	2202	150 00
	E. A. Eggers	January salary inst	2203	225 00
	C. W. Mesloh	January salary inst	2204	140 00
	B. A. Eisenlohr	January salary inst	2205	80 00
	J. R. Smith	January salary inst	2206	225 00
	A. W. Hodgman	January salary inst	2207	140 00
	W. S. Elden	January salary inst	2208	120 00
	W. R. Lazenby	January salary inst	2209	225 00
	V. H. Davis	January salary inst	2210	62 50
	F. E. Sanborn	January salary inst	2211	200 00
	W. A. Knight	January salary inst	2212	120 00
	W. H. Renck	January salary inst	2213	100 00
	C. P. Crowe	January salary inst	2214	100 00
	C. S. Van Dyke	January salary inst	2215	30 00
	S. C. Derby	January salary inst	2216	225 00
	W. F. Hunter	January salary inst	2217	250 00
	J. H. Collins	January salary inst	2218	20 00
	J. A. Shauck	January salary inst	2219	50 00
	E. B. Kinkead	January salary inst	2220	120 00
	W. H. Page	January salary inst	2221	180 00
	E. O. Randall	January salary inst	2222	70 00
	Olive Jones	January salary inst	2223	135 00
	Olive Jones	February salary inst	2224	135 00
	F. A. Bohn	January salary inst	2225	50 00
	Harriet Townshend	January salary inst	2226	55 00
	Gertrude Kellicott	January salary inst	2227	55 00
	Maude Jeffrey	January salary inst	2228	55 00
	C. B. Guittard	January salary inst	2229	55 00
	Chas. B. Sayre	January salary inst	2230	20 00

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1902				
Jan. 25	Elizabeth Smythe	January salary inst	2231	40 00
	R. D. Bohannon	January salary inst	2232	225 00
	Geo. W. McCoard	January salary inst	2233	160 00
	J. E. Boyd	January salary inst	2234	150 00
	C. L. Arnold	January salary inst	2235	120 00
	H. W. Kuhn	January salary inst	2236	100 00
	S. E. Rasor	January salary inst	2237	90 00
	J. F. Travis	January salary inst	2238	30 00
	K. D. Swartzel	January salary inst	2239	120 00
	Wm. T. Magruder	January salary inst	2240	225 00
	E. A. Hitchcock	January salary inst	2241	175 00
	Geo. W. Frost	January salary inst	2242	60 00
	A. F. Hall	January salary inst	2243	66 66
	N. W. Lord	January salary inst	2244	200 00
	E. E. Somermeier	January salary inst	2245	100 00
	A. D. Sproat	January salary inst	2246	25 00
	Gustav Bruder	January salary inst	2247	20 00
	F. A. Ray	January salary inst	2248	200 00
	Geo. B. Kauffman	January salary inst	2249	200 00
	C. A. Dye	January salary inst	2250	100 00
	W. H. Scott	January salary inst	2251	225 00
	T. H. Haines	January salary inst	2252	120 00
	A. E. Davies	January salary inst	2253	90 00
	C. P. Linhart	January salary inst	2254	160 00
	C. M. Berryman	January salary inst	2255	75 00
	D. C. Huddleson	January salary inst	2256	50 00
	B. F. Thomas	January salary inst	2257	225 00
	A. D. Cole	January salary inst	2258	190 00
	F. E. Kester	January salary inst	2259	90 00
	H. B. Brooks	January salary inst	2260	25 00
	J. V. Denney	January salary inst	2261	225 00
	W. L. Graves	January salary inst	2262	120 00
	G. H. McKnight	January salary inst	2263	120 00
	Anna Williams	January salary inst	2264	30 00
	Clara C. Ewalt	January salary inst	2265	30 00
	F. C. McKinney	January salary inst	2266	30 00
	B. L. Bowen	January salary inst	2267	225 00
	Chas. A. Bruce	January salary inst	2268	140 00
	J. D. Batchelder	January salary inst	2269	120 00
	D. S. White	January salary inst	2270	180 00
	Paul Fischer	January salary inst	2271	180 00
	S. Sisson	January salary inst	2272	150 00
	O. V. Brumley	January salary inst	2273	75 00
	H. Osborn	January salary inst	2274	225 00
	J. S. Hine	January salary inst	2275	100 00
	F. L. Landacre	January salary inst	2276	100 00
	M. T. Cook	January salary inst	2277	30 00
	W. O. Thompson	January salary inst	2278	416 67
	K. H. Duncan	January salary inst	2279	58 33
	E. D. Cockins	January salary inst	2280	60 00
	Helen R. Powell	January salary inst	2281	35 00
	E. R. Hubler	January salary inst	2282	33 33
	W. C. McCracken	January salary inst	2283	150 00
	Wm. Standley	January salary inst	2284	58 33
	W. H. Case	January salary inst	2285	50 00
	Benj. LeBay	January salary inst	2286	50 00
	Thomas Bourke	January salary inst	2287	50 00

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1902				
Jan. 25	Fred B. Brewer	January salary inst	2288	50 00
	Marion Peck	January salary inst	2289	45 00
	George Rose	January salary inst	2290	70 00
	Earl Kimmel	January salary inst	2291	20 00
	John Ricketts	January salary inst	2292	45 00
	Thos. E. Osburn	January salary inst	2293	45 00
	James Kelley	January salary inst	2294	30 00
	Chas. W. Hicks	January salary inst	2295	45 00
	Ray Barton	January salary inst	2296	20 00
	G. A. Goodspeed	January salary inst	2297	40 00
	F. E. Fleischer	January salary inst	2298	40 00
	John Brown	January salary inst	2299	25 00
	John Brown	January salary inst	2300	15 00
	J. K. Pritner	January salary inst	2301	40 00
	Wm. R. Thomas	January salary inst	2302	40 00
	Wm. Whitestine	January salary inst	2303	40 00
	H. Chantler	January salary inst	2304	40 00
	G. C. Denny	January salary inst	2305	40 00
	M. N. Cook	January salary inst	2306	40 00
	Wm. Conklin	January salary inst	2307	40 00
	H. M. Templin	January salary inst	2308	40 00
	W. Townsell	January salary inst	2309	25 00
	H. H. Hamilton	January salary inst	2310	12 50
	R. E. McIntosh	January salary inst	2311	12 50
	E. G. Bailey	January salary inst	2312	18 00
	R. M. Martin	January salary inst	2313	20 00
	Laurel Hill	January salary inst	2314	33 33
	C. H. Woodruff	January salary inst	2315	65 00
	W. C. Weir	January salary inst	2316	25 00
	James Mitchell	January salary inst	2317	40 00
	M. Waters	January salary inst	2318	30 00
	Sarah Barrows	January salary inst	2319	15 00
	M. J. Kellenberger	January salary inst	2320	25 00
	C. N. Breese	Work in dairy laboratory	2321	6 00
Feb. 6	E. F. Mangold	Work in dairy laboratory	2322	13 00
	C. C. Tarpning	Work in dairy laboratory	2323	16 00
Jan. 25	James T. Hudson	Work in dairy laboratory	2324	6 00
	E. A. Hitchcock	Balance December salary	2325	10 00
	Lily Weeks	Services as janiitress	2326	6 00
31	Lily Weeks	Salary	2327	6 00
Feb. 4	Alexis Cope	February salary inst	2328	187 50
5	J. D. Cherry	Postal guide	2329	2 50
6	J. A. Bownocker	Department supplies	2330	2 70
	H. O. Buman	Student labor	2331	3 12
	C. A. Bickham	Student labor	2332	2 25
	C. P. Burkley	Student labor	2333	15 15
	F. C. Clark	Department supplies	2334	1 35
	L. W. Funk	Student labor	2335	18 15
	H. J. Gerard	Guide work	2336	8 63
	W. D. Griffith	Campus work	2337	22 35
	J. S. Hine	Printed labels	2338	14 25
	A. L. Harrington	Student work	2339	5 90
	Edith R. Hubler	Typewriting	2340	80
	Eva Harrington	Student labor	2341	6 18
	W. A. Hite	Student labor	2342	15 15
	W. A. Kellerman	Postage	2343	2 40
	W. F. Kern	Laboratory work	2344	4 80

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1902				
Feb. 6	F. R. Kunkle	Student labor	2345	14 62
	John McAllister	Labor	2346	9 45
	C. P. McClelland	Guide service	2347	2 88
	Ora Metz	Student labor	2348	15 53
	Geo. McClintock	Labor	2349	38 25
	Wilbert Morelan	Carpenter	2350	15 40
	R. E. McIntosh	Wiring	2351	3 25
	Max W. Morse	Mimeographing	2352	2 40
	Alena Nitzenberg	Work in library	2353	4 35
	C. C. Poindexter	Student labor	2354	8 62
	B. C. Parrett	Student labor	2355	6 90
	H. M. Plum	Laboratory work	2356	14 86
	Chas. Pixler	Wheeling coal	2357	39 00
	J. H. Randall	Carpenter work	2358	20 30
	M. A. Stoner	Milk	2359	4 00
	Wilbur Sample	Helper	2360	46 50
	J. A. Stiver	Guide service	2361	15 63
	Geo. W. Sheetz	Library work	2362	3 70
	Theo. H. Tangemann	Work in library	2363	14 25
	D. N. Witman	Laboratory assistance	2364	8 55
	E. N. Webb	Laboratory assistance	2365	6 90
	E. Wallace	Student labor	2366	15 60
	H. E. Williams	Student labor	2367	8 48
	Burr Waters	Student labor	2368	3 00
	Lloyd Yost	Drafting	2369	7 60
10	Lily Weeks	Salary	2370	6 00
11	R. M. Rownd, P. M.	Postage	2371	50 00
12	D. K. Watson	Legal service in Kendrick suits	2372	150 00
	R. D. DeWolf	Quiz work	2373	5 00
13	Columbus Gas Co.	January gas	2374	191 70
15	Carl H. Booth	Supplies	2375	75
	Thomas Beer	Hauling water	2376	7 50
14	M. Dresbach	Supplies	2377	5 41
15	Thos. E. French	Mounting charts	2378	10 60
	C. C. Fauver	Student labor	2379	4 09
	J. M. Hammond	Door wheels	2380	60
12	Jessie B. Karns	Stenography	2381	16 00
15	Frank C. Long	Books	2382	174 83
	Chas. S. Prosser	Typo sheets	2383	2 55
	Edith Seymour	Music at gymnasium	2384	18 50
	Acme Paving Co	Cement floor	2385	50 00
	Fred W. Atcherson	Feed, etc	2386	5 25
	American Bridge Co.	Beams and angles	2387	7 57
	Barrow Picture Frame Co.	Frames	2388	70 00
	Batterson Decorative House	Decorating	2389	58 59
	Bancroft & McElroy	Insurance premiums	2390	27 50
	Chas. E. Bedwell	Insurance premiums	2391	41 25
	Bucher Engraving Co.	Half tones	2392	6 76
	Blackwood, Green & Co.	Hardware	2393	10 95
	Bowden Towel Supply Co	Towel service	2394	29 33
	Columbus Wire and Iron Works	Wire cloth	2395	5 50
	Columbus Gas Co.	Coke	2396	7 15

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1902				
Feb. 15	Central Ohio Oil Co...	Engine oil	2397	9 00
	Columbus Citizens' Telephone Co.	Poles	2398	10 00
	Columbus Sporting Goods Co	Indian clubs	2399	7 75
	Jas. P. Carlile	Plaster paris	2400	2 75
	Columbus Dry Goods Co.	Notions	2401	2 15
	Capital City Machine Works	Castings, etc	2402	27 76
	Carlile & Son	Desk and chair	2403	24 00
	Cherington Printing & Engraving Co.	Stamp and ink	2404	1 75
	Champlin Printing Co..	Printing	2405	90 25
	Chas. M. Cott	Printing, etc	2406	7 75
	Columbus Supply Co...	Supplies	2407	58 99
	Dunn, Taft & Co	Cloth	2408	2 70
	Engelke & Bigelow	Freight and cartage	2409	113 24
	Erner & Hopkins	Supplies	2410	21 84
	Electric Supply and Construction Co.	Supplies	2411	8 30
	Forepaugh & Sells Bros.	Use of horses	2412	2 50
	Green, Joyce & Co	Flannelette	2413	3 97
	J. C. Howard	Painting	2414	61 25
	J. R. Hellenthal	Wreath	2415	25 00
	Hasbrook-Barger Co. ..	Bowls	2416	10 00
	N. C. Hager	Groceries	2417	16 03
	Hall-Collins Hardware Co.	Hardware	2418	3 70
	Hann & Adair	Printing, etc	2419	23 10
	Kauffman-Lattimer Co..	Drugs and chemicals	2420	63 63
	Key of Kappa Kappa Gamma	Advertisement	2421	25 00
	Kappa Alpha Theta Journal	Advertising	2422	15 00
	Krauss, Butler & Benham Co.	Poles	2423	4 00
	Kelton & Converse	Lumber	2424	25 30
	Lutheran Book Concern.	Binding	2425	4 16
	Oscar S. Lear	Supplies and repairs	2426	7 60
	J. S. Maclean	Boxes	2427	68 40
	Murray City Coal Co....	Coal	2428	1,457 35
	Moonstone Copying Slate Co.	One No. 4, refilling	2429	1 20
14	J. E. Bender	Fees at veterinary clinic..	2430	34 52
	McAllister, Mohler & Co.	Supplies	2431	3 45
15	C. E. Morris & Co	Lumber	2432	1 50
	McClelland & Co	Supplies	2433	4 08
	W. H. Miller & Co	Valves	2434	7 68
	Nitschke Bros.	Printing	2435	17 48
	Ohio Pump and Brass Co.	Castings and repairs	2436	19 10
	Payne-McDonald Hardware Co.	Hardware	2437	25 51
	Chas. J. Palmer	Repairs	2438	1 69
	The Ruggles-Gale Co...	Pens	2439	3 50
14	Jno. T. Mack	Trustee expenses	2440	29 05
	J. McLain Smith	Expenses as trustee	2441	20 05

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1902				
Feb. 15	A. H. Smythe	Supplies	2442	5 45
	Chas. J. Siebert	Repairing rifles	2443	26 00
	Frank Sutphen	Repairing	2444	1 00
	Shilling Foundry Co.	Castings	2445	7 65
	Harry E. Smith	Cards and blanks	2446	19 45
	Sheppard & Co.	Schedules	2447	15 00
	Standard Oil Co.	Oil	2448	26 74
	Spahr & Glenn	Printing	2449	14 00
	Smith Bros. Hardware Co.	Hardware	2450	27 20
	Schoedinger, Fearn & Co.	Hardware	2451	2 11
	Schoedinger, Fearn & Co.	Hardware	2452	6 86
	Tracy, Wells & Co.	Supplies	2453	15 25
	Taylor-Williams Co.	Coal	2454	33 83
	Wm. M. Taylor Mantel and Grate Co.	Mantel	2455	37 50
	Tallmadge Hardware Co.	Hardware	2456	35 37
	Vogelgesang Furnace Co	Repairs on furnace	2457	69 60
	J. M. & W. Westwater	Portable lamp	2458	3 50
	Z. L. White & Co.	Cloth	2459	2 59
	L. S. Wells & Co.	Books, etc	2460	45 91
	Z. L. White & Co.	Denim	2461	1 60
	H. D. Yeiser	Hacks	2462	8 00
	James Penn	Hauling	2463	26 20
	Ansonia Brass and Copper Co.	Brass	2464	86 52
	American Society of Mech. Engineers	Copy volumes	2465	6 00
	W. H. Anderson & Co.	Reports	2466	6 75
	Allyn & Bacon	Book	2467	73
	The Armour Fertilizer Co.		2468	36 00
	Bausch & Lomb Opt. Co.	Supplies	2469	7 28
	The Burrows Bros. Co.	Books	2470	13 00
	New York Botanical Garden	Proceedings	2471	3 00
	Boston Book Co.	Books	2472	115 00
	Bridgeport Brass Co.	Copper	2473	26 25
	Burrows Bros. Co.	Book	2474	1 35
	Bausch & Lomb Opt. Co.	Knife	2475	3 00
	American Type Founders Co.	Staple binders	2476	3 15
	D. H. Burrell & Co.	Dairy supplies	2477	16 62
	Chic. Lab. Supply and Scale Co.	Apparatus	2478	27 75
	A. S. Clark	Books	2479	6 00
	Cross & Robinson	Book	2480	16 00
	Central Electric Co.	Heater and lamps	2481	49 50
	Creamery Package Mfg. Co.	Dairy supplies	2482	17 18
	Eimer & Amend	Tongs	2483	16 00
	Fairbanks, Morse & Co.	Sand molds, etc	2484	403 18
	Ginn & Co.	Book	2485	2 50
	Gunton's Magazine Co.	Subscription	2486	2 50

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1902				
Feb. 15	Holcomb & Hoke Mfg. Co.	Brushes	2487	19 50
	Bruno Hessling	Book	2488	4 00
	Harvard Co-operative Society	Books	2489	2 50
	Wm. G. Johnston & Co.	Magazine holders	2490	1 25
	Jones & Laughlins, Ltd.	Steel	2491	8 62
	The Kny-Scheerer Co.	Klaeger pins	2492	7 50
	Knauth, Nachod & Kuhne	Books	2493	2 11
	Ed. Klever	Poland China gilt	2494	40 00
	Library Bureau	Access book	2495	8 00
	The Laning Co.	Binding	2496	3 45
	James McCrea & Co.	Joint clamp	2497	14 06
	D. Blakely Hoar, Treas.	Supplies	2498	13 85
	The Macmillan Co.	Books	2499	1 68
	Marshall & Muschart Mach. Co.	Drill	2500	209 00
	Nat'l Municipal League.	Proceedings	2501	5 60
	F. J. Cellarius.	Advertising	2502	6 00
	E. L. Powers Co.	Subscription	2503	5 00
	Pharmaceutical Review.	Review	2504	2 50
	Wm. H. Pierce & Co.	Enlargements	2505	59 85
	Pratt & Whitney.	Reamers	2506	53 48
	James L. Robertson & Sons	Pencil arm and spring	2507	6 00
	Mrs. M. V. Singerland.	Lantern slides	2508	37 95
	E. H. Sargent & Co.	Supplies	2509	23 46
	G. E. Stechert.	Books	2510	1,489 42
	Chas. Scribner's Sons.	Books	2511	3 35
	Henry Troemner	Balance	2512	112 80
	C. L. Traver.	Journal	2513	2 00
	Torrey Botanical Club.	Index cards	2514	9 83
	Toledo Linseed Oil Wks.	Oil meal	2515	58 00
	J. M. Willis.	Berkshire Gilt	2516	30 00
17	Lily Weeks	Salary	2517	6 00
	R. M. Rownd, P. M.	Envelopes, wrappers and stamps	2518	55 00
18	The Toledo Blade Co.	Papers	2519	2 00
21	Thos. F. Hunt.	February salary inst.	2520	250 00
	John W. Decker.	February salary inst.	2521	160 00
	Frank Ruhlen	February salary inst.	2522	75 00
	B. B. Herrick.	February salary inst.	2523	50 00
	D. A. Crowner.	February salary inst.	2524	66 66
	F. E. Hamilton.	February salary inst.	2525	50 00
	M. F. Miller.	February salary inst.	2526	80 00
	H. A. Weber.	February salary inst.	2527	225 00
	A. E. Vinson.	February salary inst.	2528	90 00
	Rudolph Hirsch	February salary inst.	2529	30 00
	Geo. W. Knight.	February salary inst.	2530	250 00
	T. C. Smith.	February salary inst.	2531	120 00
	A. H. Tuttle.	February salary inst.	2532	100 00
	A. M. Bleile.	February salary inst.	2533	225 00
	C. B. Morrey.	February salary inst.	2534	120 00
	M. Dresbach	February salary inst.	2535	50 00
	W. C. Miller.	February salary inst.	2536	40 00
	H. C. Lord	February salary inst.	2537	225 00

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1902				
Feb. 21	C. G. Conley	February salary inst	2538	30 00
	W. A. Kellerman	February salary inst	2539	225 00
	J. H. Schaffner	February salary inst	2540	120 00
	J. C. Bridwell	February salary inst	2541	25 00
	Elma B. Perry	February salary inst	2542	25 00
	F. J. Tyler	February salary inst	2543	25 00
	O. E. Jennings	February salary inst	2544	45 00
	S. A. Norton	February salary inst	2545	125 00
	Wm. McPherson	February salary inst	2546	225 00
	W. E. Henderson	February salary inst	2547	140 00
	C. W. Foulk	February salary inst	2548	110 00
	C. P. Linville	February salary inst	2549	30 00
	W. L. Dubois	February salary inst	2550	30 00
	H. T. Hance	February salary inst	2551	30 00
	C. N. Brown	February salary inst	2552	225 00
	C. E. Sherman	February salary inst	2553	140 00
	W. L. Davies	February salary inst	2554	50 00
	E. E. Harrold	February salary inst	2555	85 00
	R. W. Funk	February salary inst	2556	45 00
	Edward Orton, Jr	February salary inst	2557	200 00
	A. V. Bleininger	February salary inst	2558	100 00
	Minnie A. Stoner	February salary inst	2559	180 00
	C. P. Souther	February salary inst	2560	120 00
	Thos. E. French	February salary inst	2561	140 00
	Thos. K. Lewis	February salary inst	2562	100 00
	Silas Martin	February salary inst	2563	100 00
	J. H. Vosskuehler	February salary inst	2564	100 00
	J. R. Chamberlain	February salary inst	2565	30 00
	F. C. Clark	February salary inst	2566	200 00
	J. E. Hagerty	February salary inst	2567	110 00
	Grace Pitts	February salary inst	2568	30 00
	D. R. Major	February salary inst	2569	150 00
	F. C. Caldwell	February salary list	2570	180 00
	F. A. Fish	February salary inst	2571	100 00
	R. D. De Wolf	February salary inst	2572	30 00
	J. P. Covan	February salary inst	2573	80 00
	A. C. Barrows	February salary inst	2574	225 00
	J. R. Taylor	February salary inst	2575	140 00
	W. H. Siebert	February salary inst	2576	160 00
	C. S. Prosser	February salary inst	2577	180 00
	J. A. Bownocker	February salary inst	2578	150 00
	E. A. Eggers	February salary inst	2579	225 00
	C. W. Mesloh	February salary inst	2580	140 00
	B. A. Eisenlohr	February salary inst	2581	80 00
	J. R. Smith	February salary inst	2582	225 00
	A. W. Hodgman	February salary inst	2583	140 00
	W. S. Elden	February salary inst	2584	120 00
	W. R. Lazenby	February salary inst	2585	225 00
	V. H. Davis	February salary inst	2586	62 50
	F. E. Sanborn	February salary inst	2587	200 00
	W. A. Knight	February salary inst	2588	120 00
	W. H. Renck	February salary inst	2589	100 00
	C. P. Crowe	February salary inst	2590	100 00
	C. S. Van Dyke	February salary inst	2591	30 00
	S. C. Derby	February salary inst	2592	225 00
	W. F. Hunter	February salary inst	2593	250 00
	J. H. Collins	February salary inst	2594	20 00

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1902				
Feb. 21	J. A. Shauck	February salary inst	2595	50 00
	E. B. Kinkead	February salary inst	2596	120 00
	W. H. Page	February salary inst	2597	180 00
	E. O. Randall	February salary inst	2598	70 00
	Olive Jones	February salary inst	2599	135 00
	F. A. Bohn	February salary inst	2600	50 00
	Harriet Townshend	February salary inst	2601	55 00
	Gertrude S. Kellicott	February salary inst	2602	55 00
	Maude Jeffrey	February salary inst	2603	55 00
	C. B. Guittard	February salary inst	2604	55 00
	C. C. Eckhardt	February salary inst	2605	20 00
	Elizabeth Smythe	February salary inst	2606	40 00
	R. D. Bohannon	February salary inst	2607	225 00
	Geo. W. McCoard	February salary inst	2608	160 00
	J. E. Boyd	February salary inst	2609	150 00
	C. E. Arnold	February salary inst	2610	120 00
	H. W. Kuhn	February salary inst	2611	100 00
	S. E. Rasor	February salary inst	2612	90 00
	J. F. Travis	February salary inst	2613	30 00
	K. D. Swartzel	February salary inst	2614	120 00
	Wm. T. Magruder	February salary inst	2615	225 00
	E. A. Hitchcock	February salary inst	2616	175 00
	Geo. W. Frost	February salary inst	2617	60 00
	A. F. Hall	February salary inst	2618	66 66
	N. W. Lord	February salary inst	2619	200 00
	E. E. Somermeier	February salary inst	2620	100 00
	A. D. Sproat	February salary inst	2621	25 00
	Gustav Bruder	February salary inst	2622	20 00
	Frank A. Ray	February salary inst	2623	200 00
	Geo. B. Kauffman	February salary inst	2624	200 00
	C. A. Dye	February salary inst	2625	100 00
	W. H. Scott	February salary inst	2626	225 00
	T. H. Haines	February salary inst	2627	120 00
	A. E. Davies	February salary inst	2628	90 00
	C. P. Linhart	February salary inst	2629	160 00
	Clara M. Berryman	February salary inst	2630	75 00
	Don C. Huddleson	February salary inst	2631	50 00
	B. F. Thomas	February salary inst	2632	225 00
	A. D. Cole	February salary inst	2633	190 00
	F. E. Kester	February salary inst	2634	90 00
	H. B. Brooks	February salary inst	2635	25 00
	J. V. Denney	February salary inst	2636	225 00
	W. L. Graves	February salary inst	2637	120 00
	G. H. McKnight	February salary inst	2638	120 00
	H. C. Allen	February salary inst	2639	120 00
	Anna Williams	February salary inst	2640	30 00
	Clara C. Ewalt	February salary inst	2641	30 00
	Frank C. McKinney	February salary inst	2642	30 00
	B. L. Bowen	February salary inst	2643	225 00
	C. A. Bruce	February salary inst	2644	140 00
	J. L. Batchelder	February salary inst	2645	120 00
	D. S. White	February salary inst	2646	180 00
	Paul Fischer	February salary inst	2647	180 00
	S. Sisson	February salary inst	2648	150 00
	O. V. Brumley	February salary inst	2649	75 00
	H. Osborn	February salary inst	2650	225 00
	J. S. Hine	February salary inst	2651	100 00

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1902				
Feb. 21	F. L. Landacre	February salary inst	2652	100 00
	M. T. Cook	February salary inst	2653	30 00
	W. O. Thompson	February salary inst	2654	416 67
	K. H. Duncan	February salary inst	2655	58 33
	Carl E. Steeb	February salary inst	2656	75 00
	E. D. Cockins	February salary inst	2657	60 00
	Helen R. Powell	February salary inst	2658	35 00
	E. R. Hubler	February salary inst	2659	33 33
	Wm. C. McCracken	February salary inst	2660	150 00
	W. A. Standley	February salary inst	2661	58 33
	W. H. Case	February salary inst	2662	50 00
	Benj. LeBay	February salary inst	2663	50 00
	Thos. Boude	February salary inst	2664	50 00
	Fred B. Brewer	February salary inst	2665	50 00
	Marion Peck	February salary inst	2666	45 00
	Geo. R. Rose	February salary inst	2667	70 00
	Earl Kimmel	February salary inst	2668	20 00
	John Ricketts	February salary inst	2669	45 00
	Thos. E. Osburn	February salary inst	2670	45 00
	James Kelley	February salary inst	2671	30 00
	Chas. W. Hicks	February salary inst	2672	45 00
	Ray Barton	February salary inst	2673	20 00
	G. A. Goodspeed	February salary inst	2674	40 00
	F. E. Fleischer	February salary inst	2675	40 00
	John Brown	February salary inst	2676	25 00
	John Brown	February salary inst	2677	15 00
	J. K. Pritner	February salary inst	2678	40 00
	Wm. R. Thomas	February salary inst	2679	40 00
	Wm. Whitestine	February salary inst	2680	40 00
	H. C. Chantler	February salary inst	2681	40 00
	G. C. Denny	February salary inst	2682	40 00
	M. N. Cook	February salary inst	2683	40 00
	Wm. Conklin	February salary inst	2684	40 00
	H. M. Templin	February salary inst	2685	40 00
	Wash Townsell	February salary inst	2686	25 00
	H. H. Hamilton	February salary inst	2687	12 50
	R. E. McIntosh	February salary inst	2688	12 50
	E. G. Bailey	February salary inst	2689	18 00
	Laurel Hill	February salary inst	2690	33 33
	C. H. Woodruff	February salary inst	2691	65 00
	R. M. Martin	February salary inst	2692	20 00
	W. C. Weir	February salary inst	2693	25 00
	James Mitchell	February salary inst	2694	40 00
	Mildred Waters	February salary inst	2695	30 00
	Sarah Barrows	February salary inst	2696	15 00
	M. J. Kellenberger	February salary inst	2697	25 00
	Jos. N. Bradford	February salary inst	2698	200 00
18	R. M. Rownd, P. M.	Postage	2699	1 00
24	Lily Weeks	One weeks' salary	2700	6 00
25	Hardin Blaney	Labor	2701	13 50
27	F. C. Caldwell	Supplies for department	2702	4 83
Mch. 1	Wm. Whitestine	Squirrel feed	2703	3 00
	Alexis Cope	March salary	2704	187 50
	R. M. Rownd, P. M.	Stamps and postals	2705	16 00
	Lily Weeks	Salary	2706	6 00
4	R. M. Rownd, P. M.	500 2-cent stamps	2707	10 00
	T. J. Godfrey	Trustee expenses	2708	26 35

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1902				
Mch. 4	J. E. Bender	Fees	2709	12 03
5	R. M. Rownd, P. M.	Postage deposit	2710	10 00
	W. U. Telegraph Co.	Telegrams	2711	3 14
	Columbus Gas Co.	February gas bill	2712	186 15
6	J. E. Bard	Campus work	2713	1 12
7	C. P. Burkey	Student work	2714	8 55
6	H. O. Buman	Student work	2715	2 00
	Alexis Cope	Money advanced	2716	2 40
	M. Dresbach	Department supplies	2717	5 05
	J. V. Denney	Delegate expenses	2718	22 65
	L. W. Funk	Labor	2719	31 35
	C. C. Fauver	Hauling water	2720	6 07
	H. J. Gerard	Guide service	2721	8 16
	Rush Greenslade	Guide service	2722	2 04
	W. D. Griffith	Campus work	2723	13 27
	T. Harvey Haines	Department supplies	2724	2 10
	W. A. Hite	Student labor	2725	8 30
	F. R. Kunkle	Student labor	2726	20 10
	Jessie B. Karns	Stenographer's work	2727	16 00
	W. F. Kern	Student labor	2728	4 50
	C. P. McClelland	Guide service	2729	4 38
	Wilbert Morelan	Carpenter work	2730	13 65
5	Geo. McClintock	Wheeling coal	2731	15 00
6	W. E. Maxwell	Student labor	2732	3 20
	O. F. Metz	Student janitor	2733	13 13
	E. L. Orndorff	Laboratory work	2734	3 00
	C. C. Poindexter	Student labor	2735	7 00
	B. C. Parrett	Laboratory assistance	2736	6 15
	Charles Pixler	Wheeling coal	2737	42 25
	Charles S. Prosser	Books	2738	2 00
	Jos. A. Stiver	Guide service	2739	13 50
	Carl E. Steeb	Notary fees	2740	3 75
	Edith Seymour	Music at gymnasium	2741	13 00
	F. W. Schwab	Laboratory assistance	2742	7 50
	W. H. Siebert	Stamps	2743	1 20
	Wilbur Sample	Labor	2744	42 00
	Roy Thompson	Library work	2745	6 50
	Theo. H. Tangemann	Library work	2746	8 20
	C. C. Wilcox	Student labor	2747	28 03
	E. Wallace	Student labor	2748	13 35
	Mildred Waters	Stenographic services	2749	3 00
	E. N. Webb	Laboratory assistance	2750	5 40
6	Burr Watters	Helper	2751	3 38
	W. A. Weber	Expenses	2752	40 25
	Acme Paving Co.	Cement	2753	5 00
	Amer. Sewer Pipe Co.	Cement	2754	4 80
	Frank I. Brown	Reporting	2755	13 75
	Bucher Engraving Co.	Etchings	2756	3 24
	Blackwood, Green & Co.	Charcoal	2757	1 00
	Bowden Towel Supply Co.	Towel service	2758	35 87
	H. Braun, Sons & Co.	Supplies	2759	70 38
	A. O. Crozier, Treas.	Proceedings	2760	13 75
	Chas. M. Cott	Postals	2761	12 00
	C. O. Paper Co.	Paper	2762	3 90
	Columbus M. and M. Supply Co.	Belting	2763	26 07

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1902				
Mch. 6	Capital City Mach. Wks.	Supplies	2764	58 30
	Champlin Prtg. Co.	Printing	2765	116 00
	The H. Cole Co.	Paper, etc.	2766	8 60
	Geo. D. Cross Lumber Co.	Lumber	2767	92 77
	Columbus Supply Co.	Supplies	2768	87 21
	E. Doddington Co.	Sky lights	2769	4 50
	Thomas M. Earl	Mounting	2770	20 00
	Engelke & Bigelow	Freight and cartage	2771	38 61
	Electric Supply & Cons. Co.	Supplies	2772	7 12
	The Erner-Hopkins Co.	Electrical supplies	2773	17 43
	Hanna Paint Mfg. Co.	Paint brush	2774	1 60
	Hann & Adair	Printing	2775	7 70
	W. H. Hines	Meteorite	2776	35 00
	Fred J. Heer	Envelopes	2777	1 25
	N. C. Hager	Groceries	2778	12 87
	P. Hayden S. Hdw. Co.	Hardware	2779	1 48
	Kauffman-Lattimer Co.	Drugs and chemicals	2780	245 40
	Oscar S. Lear	Supplies	2781	3 95
	The M. C. Lilley Co.	Letters	2782	5 50
	Murray City Coal Co.	Coal bill	2783	1,237 02
	McClelland & Co.	Supplies	2784	6 20
	J. W. Meek & Co.	Repairs	2785	2 10
	J. J. Marvin	Mill work	2786	47 00
	Nitschke Bros.	Paper, etc.	2787	48 05
	Ohio State Journal Co.	Bonds	2788	14 00
	Parsons, Frakes & Son.	Milk	2789	5 00
	James Penn	Oats	2790	32 30
	Chas. J. Palmer	Repairs	2791	16 37
	The Ruggles-Gale Co.	Holder	2792	1 35
	Standard Oil Co.	Oil	2793	31 91
	Smith Prem. Typewriter Co.	Repair and ribbon	2794	1 00
	Schroth & Potter	Shades	2795	7 15
	F. O. Schoedinger	Repairs	2796	36 06
	Schoedinger, Fearn & Co.	Tools	2797	1 40
	Seraphim B. Book Co.	Binding	2798	142 95
	Spahr & Glenn	Printing	2799	31 00
	Tallmadge Hdw. Co.	Hardware, etc.	2800	36 02
	Z. L. White & Co.	Dry Goods	2801	4 80
	L. S. Wells	Books, etc.	2802	3 00
	W. H. Anderson & Co.	Reports	2803	15 00
	American Tube Works.	Brass	2804	4 56
	American Journal of Physiology	Subscription	2805	5 00
	Baker & Co.	Platinum foil	2806	125 08
	J. Bishop & Co.	Crucibles	2807	15 40
	Boston Book Co.	Books	2808	75 00
	Frederick Carl	Motor bearings	2809	43 25
	J. Carbutt	Binders and mats	2810	1 40
	Eimer & Amend	Supplies	2811	28 95
	General Electric Co.	Apparatus	2812	118 26
	Wm. Gaertner & Co.	Supplies	2813	30 56
	S. B. Griswold	Colonial laws	2814	10 00
	Henry Heil Chemical Co.	Crucibles	2815	40 50

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1902				
Mch. 6	Hunnewell Soap Co....	Soap	2816	34 25
	H. W. Johns-Manville Co.	Packing, etc.....	2817	3 53
	Jones & Laughlins, Ltd..	Steel	2818	2 37
	The Kempsmith Mfg. Co.	Miller and attachment...	2819	648 00
	The Lunkenheimer Co..	Oil cups	2820	1 86
	Library Bureau	Subscription	2821	1 00
	A. W. Mumford	Book	2822	7 00
	Tinius, Olsen & Co.....	Appartus	2823	25 00
	The Palmer Co.....	Subscription	2824	2 00
	Regal Packing Co.....	Packing	2825	2 81
	R. W. Raymond, Sec....	Book	2826	5 00
	Safety Cylinder Valve Co....	Relief valves	2827	5 60
	The G. B. Schulte Son's Co.....	Two bundles Norway.....	2828	9 00
	G. E. Stechert	Books	2829	126 22
	J. N. Thorburn & Co....	Seeds	2830	2 85
	Union Mfg. Co.....	Chuck	2831	30 50
	Whitall Tatum Co.....	Jars	2832	30 49
	Westinghouse Elec. & Mfg. Co.....	Fan motor	2833	9 50
	Webb Stationery and Printing Co.....	Supplies	2834	7 20
	Ohio State Dairymen's Association	Advertisement	2835	10 00
	Edward S. Field	Concilio-Bibliographico account	2836	24 83
10	Lily Weeks	Salary	2837	6 00
11	Mrs. C. N. Brown.....	March salary of Prof. C. N. Brown	2838	225 00
12	E. H. Thirey.....	Exam. V. M. L. Records.	2839	5 00
13	U. S. Telephone Co.....	Toll service	2840	1 30
	Jno. W. Decker.....	Stamps	2841	2 00
14	Westinghouse E. M. Co.	1st and 2d payments on invoice No. B69163.....	2842	1,866 68
	W. O. Thompson	March salary	2843	416 67
	J. E. Bender.....	Fees at veterinary clinic..	2844	20 38
	B. B. Herrick.....	March salary	2845	50 00
15	Lily Weeks	Salary	2846	6 00
17	Curtis Wilkin	Services V. M. L. cases...	2847	5 00
	W. F. Coover.....	Laboratory assistance	2848	100 00
29	Thos. F. Hunt.....	March salary inst.....	2849	250 00
	John W. Decker	March salary inst.....	2850	160 00
	Frank Ruhlen	March salary inst.....	2851	75 00
	D. A. Crowner.....	March salary inst.....	2852	66 66
	F. E. Hamilton.....	March salary inst.....	2853	50 00
	M. F. Miller.....	March salary inst.....	2854	80 00
	H. A. Weber.....	March salary inst.....	2855	225 00
	A. E. Vinson.....	March salary inst.....	2856	90 00
	Rudolph Hirsch.....	March salary inst.....	2857	30 00
	Geo. W. Knight.....	March salary inst.....	2858	250 00
	T. C. Smith.....	March salary inst.....	2859	120 00
	A. H. Tuttle.....	March salary inst.....	2860	100 00
	A. M. Bleile.....	March salary inst.....	2861	225 00
	C. B. Morrey.....	March salary inst.....	2862	120 00
	M. Dresbach	March salary inst.....	2863	50 00
	W. C. Mills.....	March salary inst.....	2864	40 00
	H. C. Lord.....	March salary inst.....	2865	225 00

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1902				
Mch. 29	C. G. Conley	March salary inst	2866	30 00
	W. A. Kellerman	March salary inst	2867	225 00
	J. H. Shaffner	March salary inst	2868	120 00
	J. C. Bridwell	March salary inst	2869	25 00
	Elma B. Perry	March salary inst	2870	25 00
	F. J. Tyler	March salary inst	2871	25 00
	O. E. Jennings	March salary inst	2872	45 00
	S. A. Norton	March salary inst	2873	125 00
	Wm. McPherson	March salary inst	2874	225 00
	W. E. Henderson	March salary inst	2875	140 00
	C. W. Foulk	March salary inst	2876	110 00
	C. P. Linville	March salary inst	2877	30 00
	W. L. Dubois	March salary inst	2878	30 00
	H. T. Hance	March salary inst	2879	30 00
	C. E. Sherman	March salary inst	2880	140 00
	W. L. Davies	March salary inst	2881	50 00
	E. E. Harrold	March salary inst	2882	85 00
	R. W. Funk	March salary inst	2883	45 00
	Edward Orton, Jr	March salary inst	2884	200 00
	A. V. Bleininger	March salary inst	2885	100 00
	Minnie A. Stoner	March salary inst	2886	180 00
	C. P. Souther	March salary inst	2887	120 00
	J. N. Bradford	March salary inst	2888	200 00
	Thos. E. French	March salary inst	2889	140 00
	Thos. K. Lewis	March salary inst	2890	100 00
	Silas Martin	March salary inst	2891	100 00
	J. H. Vosskuehler	March salary inst	2892	100 00
	J. R. Chamberlain	March salary inst	2893	30 00
	F. C. Clark	March salary inst	2894	200 00
	J. E. Hagerty	March salary inst	2895	110 00
	Grace Pitts	March salary inst	2896	30 00
	D. R. Major	March salary inst	2897	150 00
	F. C. Caldwell	March salary inst	2898	180 00
	F. A. Fish	March salary inst	2899	100 00
	R. E. McIntosh	March salary inst	2900	15 00
	J. P. Covan	March salary inst	2901	80 00
	A. C. Barrows	March salary inst	2902	225 00
	J. R. Taylor	March salary inst	2903	140 00
	W. H. Siebert	March salary inst	2904	160 00
	Chas. S. Prosser	March salary inst	2905	180 00
	J. A. Bownocker	March salary inst	2906	150 00
	E. A. Eggers	March salary inst	2907	225 00
	C. W. Mesloh	March salary inst	2908	140 00
	B. A. Eisenlohr	March salary inst	2909	80 00
	J. R. Smith	March salary inst	2910	225 00
	A. W. Hodgman	March salary inst	2911	140 00
	W. S. Elden	March salary inst	2912	120 00
	W. R. Lazenby	March salary inst	2913	225 00
	V. H. Davis	March salary inst	2914	62 50
	F. E. Sanborn	March salary inst	2915	200 00
	W. A. Knight	March salary inst	2916	120 00
	W. H. Renck	March salary inst	2917	100 00
	C. P. Crowe	March salary inst	2918	100 00
	S. C. Derby	March salary inst	2919	225 00
	W. F. Hunter	March salary inst	2920	250 00
	J. H. Collins	March salary inst	2921	20 00
	John A. Shauck	March salary inst	2922	50 00
	E. B. Kinkead	March salary inst	2923	120 00

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1902				
Mch. 29	W. H. Page	March salary inst	2924	180 00
	E. O. Randall	March salary inst	2925	70 00
	Olive Jones	March salary inst	2926	135 00
	F. A. Bohn	March salary inst	2927	50 00
	Harriet M. Townshend	March salary inst	2928	55 00
	Gertrude Kellicott	March salary inst	2929	55 00
	Maude Jeffrey	March salary inst	2930	55 00
	C. B. Guittard	March salary inst	2931	55 00
	C. G. Eckhardt	March salary inst	2932	20 00
	Elizabeth Smythe	March salary inst	2933	40 00
	R. D. Bohannon	March salary inst	2934	225 00
	Geo. W. McCoard	March salary inst	2935	160 00
	J. E. Boyd	March salary inst	2936	150 00
	C. E. Arnold	March salary inst	2937	120 00
	H. W. Kuhn	March salary inst	2938	100 00
	S. E. Rasor	March salary inst	2939	90 00
	J. F. Travis	March salary inst	2940	30 00
	K. D. Swartzel	March salary inst	2941	120 00
	W. T. Magruder	March salary inst	2942	225 00
	E. A. Hitchcock	March salary inst	2943	175 00
	Geo. W. Frost	March salary inst	2944	60 00
	C. P. Linhart	March salary inst	2945	5 18
	A. F. Hall	March salary inst	2946	66 66
	N. W. Lord	March salary inst	2947	200 00
	E. E. Somermeier	March salary inst	2948	100 00
	A. D. Sproat	March salary inst	2949	25 00
	Gustav Bruder	March salary inst	2950	20 00
	Frank A. Ray	March salary inst	2951	200 00
	Geo. B. Kauffman	March salary inst	2952	200 00
	C. A. Dye	March salary inst	2953	100 00
	W. H. Scott	March salary inst	2954	225 00
	T. H. Haines	March salary inst	2955	120 00
	A. E. Davies	March salary inst	2956	90 00
	C. P. Linhart	March salary inst	2957	160 00
	Clara M. Berryman	March salary inst	2958	75 00
	Don C. Huddleson	March salary inst	2959	50 00
	B. F. Thomas	March salary inst	2960	225 00
	A. D. Cole	March salary inst	2961	190 00
	F. E. Kester	March salary inst	2962	90 00
	H. B. Brooks	March salary inst	2963	25 00
	J. V. Denney	March salary inst	2964	225 00
	W. L. Graves	March salary inst	2965	120 00
	G. H. McKnight	March salary inst	2966	120 00
	H. C. Allen	March salary inst	2967	120 00
	Anna Williams	March salary inst	2968	30 00
	Clara C. Ewalt	March salary inst	2969	30 00
	Frank C. McKinney	March salary inst	2970	30 00
	B. L. Bowen	March salary inst	2971	225 00
	C. A. Bruce	March salary inst	2972	140 00
	J. D. Batchelder	March salary inst	2973	120 00
	D. S. White	March salary inst	2974	180 00
	Paul Fischer	March salary inst	2975	180 00
	S. Sisson	March salary inst	2976	150 00
	O. V. Brumley	March salary inst	2977	75 00
	H. Osborn	March salary inst	2978	225 00
	J. S. Hine	March salary inst	2979	100 00
	F. L. Landacre	March salary inst	2980	100 00
	M. T. Cook	March salary inst	2981	30 00

STATEMENT II—Continued.

Date. 1902	To whom paid.	For what purpose.	No.	Amount.
1902				
Mch. 29	K. H. Duncan	March salary inst	2982	58 33
	E. D. Cockins	March salary inst	2983	60 00
	H. R. Powell	March salary isnt	2984	35 00
	C. E. Steeb	March salary inst	2985	75 00
	E. R. Hubler	March salary inst	2986	33 33
	Wm. C. McCracken	March salary inst	2987	150 00
	Wm. Standley	March salary inst	2988	58 33
	W. H. Case	March salary inst	2989	50 00
	Benj. LeBay	March salary isnt	2990	50 00
	Thos. A. Boude	March salary inst	2991	50 00
	Fred B. Brewer	March salary inst	2992	50 00
	Marion Peck	March salary inst	2993	45 00
	Geo. R. Rose	March salary inst	2994	70 00
	Earl Kimmel	March salary inst	2995	20 00
	John Ricketts	March salary inst	2996	45 00
	Thomas E. Osburn	March salary inst	2997	45 00
	James Kelley	March salary inst	2998	30 00
	Chas. W. Hicks	March salary inst	2999	45 00
	Ray Barton	March salary inst	3000	20 00
	G. A. Goodspeed	March salary inst	3001	40 00
	F. E. Fleischer	March salary inst	3002	40 00
	John Brown	March salary inst	3003	15 00
	John Brown	March salary inst	3004	25 00
	J. K. Pritner	March salary inst	3005	40 00
	Wm. R. Thomas	March salary inst	3006	40 00
	Wm. Whitestine	March salary inst	3007	40 00
	Harry Chantler	March salary inst	3008	40 00
	G. C. Denny	March salary inst	3009	40 00
	M. N. Cook	March salary inst	3010	40 00
	Wm. C. Conklin	March salary inst	3011	40 00
	H. M. Templin	March salary inst	3012	40 00
	Wash Townsell	March salary inst	3013	25 00
	H. Hamilton	March salary inst	3014	12 50
	E. G. Bailey	March salary inst	3015	18 00
	R. M. Martin	March salary inst	3016	20 00
	Laurel L. Hill	March salary inst	3017	33 33
	C. H. Woodruff	March salary inst	3018	65 00
	W. C. Weir	March salary inst	3019	25 00
	James Mitchell	March salary inst	3020	40 00
	Mildred Watters	March salary inst	3021	30 00
	Sarah Barrows	March salary inst	3022	15 00
	M. J. Kellenberger	March salary inst	3023	25 00
	C. S. Van Dyke	March salary inst	3024	30 00
21	Filmore Musser	Map V. M. Lands	3025	10 00
	R. M. Rownd, P. M.	Stamps	3026	20 00
22	Lily Weeks	Salary	3027	6 00
	W. D. Guilbert, Auditor.	Copies of surveys	3028	9 30
25	T. Harvey Haines	Supplies	3029	2 90
29	F. E. Beutler	March salary inst	3030	12 50
28	Lily Weeks	Salary	3031	6 00
29	W. F. Coover	Laboratory assistance	3032	25 00
	F. R. Kunkle	Student labor	3033	15 32
April 1	Ohio National Bank	Money order on London	3034	19 63
	Ohio National Bank	Money order on London	3035	4 21
3	Carl Archer	Helping fireman	3036	18 00
	Clara M. Berryman	Department supplies	3037	1 02
	H. O. Buman	Student labor	3038	2 50
	C. P. Burkey	Student labor	3039	8 90

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1902				
Apr. 3	Wm. V. Crowe	Drilling samples	3040	3 60
	J. V. Denney	Expenses	3041	15 10
	C. C. Fauver	Hauling water	3042	10 31
	L. W. Funk	Student labor	3043	30 00
	Wm. D. Griffith	Campus work	3044	27 90
	H. J. A. Gerald	Guide service	3045	10 13
	Rush Greenslade	Guide service	3046	1 50
	Edith R. Hubler	Typewriting	3047	1 50
	S. S. Harrington	Fellowship work	3048	8 70
	W. A. Hite	Work in library	3049	9 80
	Eva Harrington	Work in library	3050	7 75
	W. A. Kellerman	Postage	3051	6 44
	Jos. H. Kindle	Fellowship work	3052	3 90
	Geo. W. Knight	Expenses	3053	10 95
	Jessie B. Karns	Typewriting	3054	16 00
	The Lantern	Advertising and papers	3055	58 34
	Harry Lynn	Fellowship work	3056	2 40
	F. C. Long	Books	3057	121 75
	Geo. McClintock	Wheeling coal	3058	18 00
	C. P. McClelland	Guide service	3059	3 88
	Ora Metz	Janitor work	3060	11 93
	Allena Mitzenberg	Work in library	3061	6 55
	Edward Orton, Jr	Money advanced	3062	2 10
	Lloyd Owen	Student labor	3063	7 56
	C. C. Poindexter	Student labor	3064	7 56
	H. M. Plum	Laboratory work	3065	7 80
	Chas. Pixler	Wheeling coal	3066	22 50
	Jean P. Pratt	Student labor	3067	4 65
	J. R. Smith	Freight and cartage	3068	84
	Jos. A. Stiver	Guide work	3069	14 50
	Edith Seymour	Music at gymnasium	3070	13 00
	Carl E. Steeb	Notary work	3071	2 50
	Geo. F. Spahlinger	Campus work	3072	1 00
	D. I. Skidmore	Campus work	3073	1 25
	W. H. Siebert	Expenses	3074	9 15
	T. H. Tangemann	Work in library	3075	8 40
	C. S. Van Dyke	Student assistance	3076	13 00
	C. C. Wilcox	Student labor	3077	5 30
	E. Wallace	Student labor	3078	12 75
	H. G. Weinland	Student labor	3079	7 42
	H. E. Williams	Student labor	3080	5 55
	A. H. Walker	Student assistant	3081	16 66
	Fred W. Atcherson	Coach	3082	3 50
	Berlin Printing Co	Printing	3083	69 50
	Bucher Eng. & Mfg. Co	Cuts	3084	2 25
	Wm. Whitestine	Squirrel feed	3085	3 00
	Bowden Towel Supply Co	Towel supply	3086	33 02
	Columbus Photo Supply Co	Seeds plates	3087	1 56
	Cotts Quick Printing House	Printing	3088	7 75
	Columbus Merchandise Co	Merchandise	3089	7 34
	Columbus Dry Goods Co.	Notions	3090	3 00
	Columbus Gas Co	Coke	3091	12 02
	Cherington Printing & Engraving Co	Stamps	3092	1 05

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1902				
Apr. 3	Columbus Macadam Co.	Crushed stone	3093	17 96
	Columbus M. & M. Supply Co	Supplies	3094	3 48
	Columbus Supply Co	Supplies	3095	8 74
	Central Ohio Paper Co.	Paper	3096	2 25
	Capital City Machine Works	Belt and drill	3097	1 47
	Champlin Printing Co.	Printing	3098	34 25
	W. J. Davidson	Oats	3099	26 00
	Engelke & Bigelow	Freight and cartage	3100	20 19
	Erner & Hopkins	Supplies	3101	18 24
	John R. Hellenthal	Wreath	3102	15 00
	Chas. W. Herb	Boxes	3103	6 60
	N. C. Hager	Groceries	3104	8 46
	S. F. Harriman	Files	3105	2 60
	Hann & Adair	Printing	3106	8 00
	Hanna Paint Mfg. Co.	Bronze	3107	2 65
	Jeffrey Mfg. Co	Swivel spout	3108	20 00
	Kauffman-Lattimer Co.	Drugs and sundries	3109	186 96
	M. C. Lilley & Co	Medals, etc	3110	7 75
	Oscar S. Lear	Repairs and supplies	3111	14 55
	J. J. Marvin	Hickory sticks	3112	16 00
	Murray City Coal Co	Coal	3113	1,197 13
	Nitschke Bros	Envelopes	3114	5 00
	Ohio Leather Co	Leather	3115	50
	Payne-McDonald Hardware Co	Hardware	3116	18 67
	Puntenney & Eustler	Tuning piano	3117	5 00
	James Penn	Hauling straw	3118	7 20
	Penna. Fuel Co	Crushed stone	3119	96 47
	A. H. Smythe	Supplies	3120	8 60
	Andrew Spittal	Labor	3121	33 17
	Harry E. Smith	Printing	3122	3 25
	F. O. Schoedinger	Repairing roof	3123	56 20
	Shilling Foundry Co	Castings	3124	4 04
	Seraphim B. Book Co.	Binding	3125	61 15
	Standard Oil Co	Oil	3126	35 67
	Taylor, Williams & Co.	Coal	3127	63 88
	Tallmadge Hardware Co.	Hardware	3128	15 05
	Tracy-Wells Co	Supplies	3129	27 05
	L. G. White	Storage batteries	3130	20 00
	Z. L. White	Cheese cloth	3131	2 97
	Zaner & Bloser	Album	3132	20 00
	American Typefounders Co	Padding glue	3133	1 50
	American Pharmaceutical Association	Proceedings	3134	11 00
	American Ceramic Society	Legers' writings	3135	7 00
	Allyn & Bacon	Book	3136	1 06
	American Berkshire Association	Record	3137	18 00
	W. H. Anderson & Co.	Reports	3138	8 75
	American Can Co	Cabinets	3139	107 72
	Bausch & Lomb Opitcal Co	Microscopes	3140	225 00
	Boston Testing Laboratories	Subscription	3141	3 00

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1902				
Apr. 3	Congdon & Britnell....	Books	3142	32 00
	Cincinnati Screw & Tap Co.....	Bolts and nuts.....	3143	5 46
	P. P. Caprom & Bro....	Statuette	3144	15 30
	Clarke Conwell	Art of printing	3145	5 00
	F. S. Crane.....	List of high schools.....	3146	10 00
	Albert Dickinson Co....	Seeds	3147	82 63
	Eimer & Amend	Filter papers	3148	37 40
	W. D. Forbes & Co.....	Rod steel, etc.....	3149	51 60
	C. Hempsted.....	Pictures	3150	12 00
	Houghton, Miffin & Co..	Books	3151	45 60
	S. Hawkridge	Oxygen cylinder	3152	27 44
	International Monthly ..	Books	3153	14 00
	H. W. Johns-Manville Co.....	Supplies	3154	5 79
	H. Kohlebrand & Co...	Compound	3155	6 25
	Library Bureau	Publication	3156	1 00
	Lunkenheimer Co.....	Valves	3157	8 95
	The Macmillan Co.....	Books	3158	6 06
	F. J. Stokes Machine Co.	Punches	3159	13 00
	E. H. Sargent & Co.....	Scorifiers	3160	3 13
	G. E. Stechert	Books	3161	82 03
	Edw. Thompson Co.....	Encyclopedia law	3162	6 00
	The W. S. Tyler Co.....	Wire cloth	3163	40 50
	J. H. Williams & Co....	Forgings, etc.....	3164	6 88
	Webb Stationery and Printing Co.....	Printing	3165	32 00
	Westinghouse E. & M. Co.....	Generator and blocks.....	3166	92 27
4	Columbus Citizen's Telephone Co.....	Phone rentals to June 30, 1902.....	3167	98 10
	Central Union Telephone Co.....	February, March and April rental.....	3168	15 00
	Alexis Cope	April salary inst.....	3169	187 50
	Ohio National Bank.....	Money order	3170	2 00
7	John E. Bender.....	Fees veterinary clinic	3171	23 47
8	Smith Bros.' Hardware Co.....	Padlocks and keys.....	3172	206 25
14	Lily Weeks	Salary	3173	6 00
16	U. S. Telephone Co....	Toll service	3174	50
17	K. D. Swartzel.....	Expenses	3175	4 85
26	Thomas F. Hunt.....	April salary inst.....	3176	250 00
	John W. Decker.....	April salary inst.....	3177	160 00
	Frank Ruhlen.....	April salary inst.....	3178	75 00
	F. E. Hamilton.....	April salary inst.....	3179	50 00
	M. F. Miller.....	April salary inst.....	3180	80 00
	H. A. Weber.....	April salary inst.....	3181	225 00
	A. E. Vinson.....	April salary inst.....	3182	90 00
	Rudolph Hirsch	April salary inst.....	3183	30 00
	Geo. W. Knight.....	April salary inst.....	3184	250 00
	T. C. Smith.....	April salary inst.....	3185	120 00
	A. H. Tuttle.....	April salary inst.....	3186	100 00
	A. M. Bleile.....	April salary inst.....	3187	225 00
	C. B. Morrey.....	April salary inst.....	3188	120 00
	M. Dresbach.....	April salary inst.....	3189	50 00
	W. C. Mills.....	April salary inst.....	3190	40 00

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1902				
Apr. 26	H. C. Lord	April salary inst	3191	225 00
	C. G. Conley	April salary inst	3192	30 00
	W. A. Kellerman	April salary inst	3193	225 00
	J. H. Schaffner	April salary inst	3194	120 00
	J. C. Bridwell	April salary inst	3195	25 00
	Elma B. Perry	April salary inst	3196	25 00
	F. J. Tyler	April salary inst	3197	25 00
	O. E. Jennings	April salary inst	3198	45 00
	S. A. Norton	April salary inst	3199	125 00
	Wm. McPherson	April salary inst	3200	225 00
	W. E. Henderson	April salary inst	3201	140 00
	C. W. Foulk	April salary inst	3202	110 00
	C. P. Linville	April salary inst	3203	30 00
	W. L. Dubois	April salary inst	3204	30 00
	H. T. Hance	April salary inst	3205	30 00
	C. E. Sherman	April salary inst	3206	140 00
	W. L. Davies	April salary inst	3207	50 00
	E. E. Harrold	April salary inst	3208	85 00
	R. W. Funk	April salary inst	3209	45 00
	Edward Orton, Jr	April salary inst	3210	200 00
	A. V. Bleininger	April salary inst	3211	100 00
	M. A. Stoner	April salary inst	3212	180 00
	C. P. Souther	April salary inst	3213	120 00
	J. N. Bradford	April salary inst	3214	200 00
	Thos. E. French	April salary inst	3215	140 00
	Thos. K. Lewis	April salary inst	3216	100 00
	Silas Martin	April salary inst	3217	100 00
	J. H. Vosskuehler	April salary inst	3218	100 00
	James Kelley	April salary inst	3219	30 00
	F. C. Clark	April salary inst	3220	200 00
	J. E. Hagerty	April salary inst	3221	110 00
	Grace Pitts	April salary inst	3222	30 00
	D. R. Major	April salary inst	3223	150 00
	F C. Caldwell	April salary inst	3224	180 00
	F A. Fish	April salary inst	3225	100 00
	J. P. Covan	April salary inst	3226	80 00
	R. E. McIntosh	April salary inst	3227	15 00
	A. C. Barrows	April salary inst	3228	225 00
	J. R. Taylor	April salary inst	3229	140 00
	W. H. Siebert	April salary inst	3230	160 00
	C. S. Prosser	April salary inst	3231	180 00
21	Philip Habermann	Refund of fee for deed	3232	2 00
25	W. U. Telegraph Co	Telegram	3233	3 41
26	J. A. Bownocker	April salary inst	3234	150 00
	E. A. Eggers	April salary inst	3235	225 00
	C. W. Mesloh	April salary inst	3236	140 00
	B. A. Eisenlohr	April salary inst	3237	80 00
	J. R. Smith	April salary inst	3238	225 00
	A. W. Hodgman	April salary inst	3239	140 00
	W. S. Elden	April salary inst	3240	120 00
	W. R. Lazenby	April salary inst	3241	225 00
	V. H. Davis	April salary inst	3242	62 50
	F. E. Sanborn	April salary inst	3243	200 00
	W. A. Knight	April salary inst	3244	120 00
	W. H. Renck	April salary inst	3245	100 00
	C. P. Crowe	April salary inst	3246	100 00
	C. S. Van Dyke	April salary inst	3247	30 00
	S. C. Derby	April salary inst	3248	225 00

STATEMENT II—Continued

Date.	To whom paid.	For what purpose.	No.	Amount.
1902				
Apr. 26	W. F. Hunter	April salary inst	3249	250 00
	J. H. Collins	April salary inst	3250	20 00
	J. A. Shauck	April salary inst	3251	50 00
	E. B. Kinkead	April salary inst	3252	120 00
	W. H. Page	April salary inst	3253	180 00
	E. O. Randall	April salary inst	3254	70 00
	F. A. Bohn	April salary inst	3255	50 00
	Harriet N. Townshend	April salary inst	3256	55 00
	Gertrude Kellicott	April salary inst	3257	55 00
	Maud Jeffrey	April salary inst	3258	55 00
	C. B. Guittard	April salary inst	3259	55 00
	C. G. Eckhardt	April salary inst	3260	20 00
	Elizabeth Smythe	April salary inst	3261	40 00
	R. D. Bohannon	April salary inst	3262	225 00
	Geo. W. McCoard	April salary inst	3263	160 00
	J. E. Boyd	April salary inst	3264	150 00
	C. L. Arnold	April salary inst	3265	120 00
	H. W. Kuhn	April salary inst	3266	100 00
	S. E. Rasor	April salary inst	3267	90 00
	J. F. Travis	April salary inst	3268	30 00
	K. D. Swartzel	April salary inst	3269	120 00
	Wm. T. Magruder	April salary inst	3270	225 00
	E. A. Hitchcock	April salary inst	3271	175 00
	Geo. W. Frost	April salary inst	3272	60 00
	A. F. Hall	April salary inst	3273	66 66
	N. W. Lord	April salary inst	3274	200 00
	E. E. Somermeier	April salary inst	3275	100 00
	A. D. Sproat	April salary inst	3276	25 00
	Gustav Bruder	April salary inst	3277	20 00
	Frank A. Ray	April salary inst	3278	200 00
	Geo. B. Kauffman	April salary inst	3279	200 00
	C. A. Dye	April salary inst	3280	100 00
	W. H. Scott	April salary inst	3281	225 00
	T. H. Haines	April salary inst	3282	120 00
	A. E. Davies	April salary inst	3283	90 00
	C. P. Linhart	April salary inst	3284	160 00
	Clara M. Berryman	April salary inst	3285	75 00
	D. C. Huddleson	April salary inst	3286	50 00
	B. F. Thomas	April salary inst	3287	225 00
	A. D. Cole	April salary inst	3288	190 00
	F. E. Kester	April salary inst	3289	90 00
	H. B. Brooks	April salary inst	3290	25 00
	J. V. Denney	April salary inst	3291	225 00
	W. L. Graves	April salary inst	3292	120 00
	G. H. McKnight	April salary inst	3293	120 00
	H. C. Allen	April salary inst	3294	120 00
	A. E. Williams	April salary inst	3295	30 00
	Clara C. Ewalt	April salary inst	3296	30 00
	F. C. McKinney	April salary inst	3297	30 00
	B. L. Bowen	April salary inst	3298	225 00
	C. A. Bruce	April salary inst	3299	140 00
	J. D. Batchelder	April salary inst	3300	120 00
	D. S. White	April salary inst	3301	180 00
	Paul Fischer	April salary inst	3302	180 00
	S. Sisson	April salary inst	3303	150 00
	O. V. Brumley	April salary inst	3304	75 00
	H. Osborn	April salary inst	3305	225 00
	W. O. Thompson	April salary inst	3306	416 67

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1902				
Apr. 26	J. S. Hine	April salary inst.	3307	100 00
	F. L. Landacre	April salary inst.	3308	100 00
	M. T. Cook	April salary inst.	3309	30 00
	K. H. Duncan	April salary inst.	3310	58 33
	E. D. Cockins	April salary inst.	3311	60 00
	Helen R. Powell	April salary inst.	3312	35 00
	Carl E. Steeb	April salary inst.	3313	75 00
	Edith R. Hubler	April salary inst.	3314	33 33
	Wm. C. McCracken	April salary inst.	3315	150 00
	Wm. Standley	April salary inst.	3316	58 33
	W. H. Case	April salary inst.	3317	50 00
	Benj. LeBay	April salary inst.	3318	50 00
	Thos. A. Boude	April salary inst.	3319	50 00
	Fred B. Brewer	April salary inst.	3320	50 00
	Marion Peck	April salary inst.	3321	45 00
	Geo. R. Rose	April salary inst.	3322	70 00
	Earl Kimmel	April salary inst.	3323	20 00
	John Ricketts	April salary inst.	3324	45 00
	Thos. E. Osburn	April salary inst.	3325	45 00
	Chas. W. Hicks	April salary inst.	3326	45 00
	Ray Barton	Salary in full to and including April 26, 1902.	3327	18 00
	G. A. Goodspeed	Salary in full to and including April 26, 1902.	3328	40 00
	F. E. Fleischer	Salary in full to and including April 26, 1902.	3329	40 00
	John Brown	Salary in full to and including April 26, 1902.	3330	25 00
	John Brown	Salary in full to and including April 26, 1902.	3331	15 00
	J. K. Pritner	Salary in full to and including April 26, 1902.	3332	40 00
	W. A. Thomas	Salary in full to and including April 26, 1902.	3333	40 00
	Wm. Whitestine	Salary in full to and including April 26, 1902.	3334	40 00
	H. C. Chantler	Salary in full to and including April 26, 1902.	3335	40 00
	G. C. Denny	Salary in full to and including April 26, 1902.	3336	40 00
	M. N. Cook	Salary in full to and including April 26, 1902.	3337	40 00
	Wm. Conklin	Salary in full to and including April 26, 1902.	3338	40 00
	H. M. Templin	Salary in full to and including April 26, 1902.	3339	40 00
	W. Townsell	Salary in full to and including April 26,1902.	3340	25 00
	H. H. Hamilton	Salary in full to and including April 26, 1902.	3341	12 50
	E. G. Bailey	Salary in full to and including April 26, 1902.	3342	18 00
	R. M. Martin	Salary in full to and including April 26, 1902.	3343	20 00
	F. E. Bentler	Salary in full to and including April 26, 1902.	3344	12 50
	Laurel Hill	Salary in full to and including April 26, 1902.	3345	33 33

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1902				
Apr. 26	C. H. Woodruff	Salary in full to and including April 26, 1902	3346	65 00
	W. C. Weir	Salary in full to and including April 26, 1902	3347	25 00
	James Mitchell	Salary in full to and including April 26, 1902	3348	40 00
	Mildred Watters	Salary in full to and including April 26, 1902	3349	30 00
	Sarah Barrows	Salary in full to and including April 26, 1902	3350	15 00
	M. J. Kellenberger	April salary inst	3351	25 00
21	Lily Weeks	Salary	3352	6 00
24	R. M. Rownd, P. M.	2,000 No. 13 stamped envelopes	3353	42 80
	Columbus Gas Co	March gas	3354	247 95
26	W. F. Coover	Laboratory work	3355	25 00
28	J. E. Bender	Fees at veterinary clinic	3356	26 92
	Lily Weeks	Salary	3357	6 00
	F. H. Eno	April salary	3358	150 00
	Columbus Water Works	Water rents to April 1, '02	3359	864 48
May 3	Thomas W. Stone	April salary	3360	15 00
5	Lily Weeks	Salary	3361	6 00
7	Alexis Cope	May salary	3362	187 50
	W. Stillman Dutton	Architect fees	3363	200 52
9	W. T. Atherton	Campus work	3364	1 87
	I. J. Brobeck	Campus work	3365	4 87
	E. H. Bauman	Campus work	3366	3 00
	C. A. Bickham	Campus work	3367	3 09
	J. E. Bard	Campus work	3368	9 18
	E. G. Bailey	Student labor	3369	1 90
	C. P. Burkey	Library work	3370	8 95
	H. O. Buman	Student labor	3371	2 00
	A. E. Case	Campus work	3372	5 62
	F. M. Cashner	Campus work	3373	18 93
	S. D. Chambers	Campus work	3374	1 12
	C. M. Curtis	Campus work	3375	9 06
	Alexis Cope	Expenses	3376	47 75
	C. H. Clevenger	Night watch service	3377	10 50
	F. C. Clark	Department supplies	3378	3 75
	R. C. Doneghue	Campus work	3379	6 56
	F. I. Downs	Campus work	3380	3 62
	A. J. Duncan	Student labor	3381	1 88
	Effie Duncan	Clerical service	3382	4 70
	Grace Eagleson	Clerical work	3383	10 00
	L. W. Funk	Student labor	3384	18 45
	C. W. Fuller	Campus work	3385	5 75
	J. A. Frederick	Campus work	3386	10 34
	E. P. Feicht	Student labor	3387	2 36
	C. C. Fauver	Student labor	3388	13 01
	W. D. Griffith	Campus work	3389	20 55
	H. J. A. Gerard	Guide service	3390	8 63
	Edith R. Hubler	Typewriting	3391	50
	O. P. Humphrey	Night watch service	3392	12 00
	W. A. Hite	Work in library	3393	10 00
	J. V. Hyatt	Campus work	3394	3 99
	Carl Hagerman	Campus work	3395	2 50
	C. D. Hyatt	Campus work	3396	3 09
	D. L. Hurst	Campus work	3397	27 12

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1902				
May 9	F. Huddleston	Campus work	3398	4 00
	Jessie B. Karns	Stenographic work	3399	16 00
	F. R. Kunkle	Student labor	3400	14 27
	J. H. Kindle	Fellowship work	3401	1 80
	W. F. Kern	Laboratory work	3402	9 45
	W. A. Kellerman	Postage	3403	1 66
	L. R. Lee	Campus work	3404	9 50
	Frank C. Long	Books	3405	14 93
	Wm. T. Magruder	Supplies	3406	3 85
	Wilbert Morelan	Carpenter work	3407	9 98
	L. H. Meiche	Campus work	3408	6 75
	L. Maynard	Campus work	3409	2 50
	B. W. Maugun	Campus work	3410	1 87
	R. H. Minns	Campus work	3411	3 81
	Ida Marshall	Library work	3412	6 20
	O. F. Metz	Student labor	3413	19 20
	W. C. Mills	Fossils	3414	5 00
	Geo. McClintock	Wheeling coal	3415	45 00
	J. P. Pratt	Library work	3416	4 00
	Anna Prall	Clerical work	3417	4 60
	B. C. Parrett	Laboratory work	3418	7 35
	C. C. Poindexter	Student labor	3419	12 50
	H. M. Plum	Laboratory work	3420	11 45
	H. O. Rowe	Campus work	3421	2 87
	C. F. Ridgley	Guide work	3422	4 75
	Geo. Spahlinger	Campus work	3423	3 12
	H. Skeels	Campus work	3424	1 25
	D. I. Skidmore	Campus work	3425	2 50
	Jos. A. Stiver	Guide work	3426	16 88
	W. H. Siebert	Palmer expense	3427	3 50
	Carl E. Steeb	Notary fees	3428	5 00
	F. W. Schwab	Laboratory work	3429	4 80
	L. M. Smith	Campus work	3430	5 00
	G. O. Thompson	Campus work	3431	1 25
	T. H. Tangemann	Library work	3432	9 90
	B. F. Thomas	Expenses	3433	59 80
	G. L. Wheeler	Campus work	3434	10 31
	S. J. Weaver	Campus work	3435	2 18
	James A. G. Whetzel	Quartermaster's fees	3436	5 00
	Burr Watters	Student labor	3437	9 25
	H. E. Williams	Student labor	3438	9 75
	E. Wallace	Student labor	3439	24 45
	H. G. Weinland	Student labor	3440	4 53
	E. N. Webb	Laboratory work	3441	8 25
	Acme Paving Co	Cement	3442	4 78
	Barrow Picture Frame Co	Frames	3443	20 40
	H. Braun Sons & Co.	Oil, etc	3444	5 65
	Bowden Towel Supply Co	Towel service	3445	5 19
	Berlin Printing Co	Postals	3446	5 10
	Blackwood, Green & Co.	Hardware	3447	5 18
	Citizen's Publishing Co.	Advertising	3448	1 50
	Columbus Dispatch	Advertising	3449	3 60
	Central Ohio Oil Co	Oil	3450	9 45
	J. D. Cochran	Supplies	3451	4 30
	Central Ohio Paper Co.	Cards, etc	3452	9 71
	G. D. Cross Lumber Co.	Lumber	3453	4 20

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1902				
May 9	Columbus Wire & Iron Works	Trellisses	3454	12 50
	Cherington Printing & Engraving Co	Pads, stamps, etc	3455	4 60
	Capital City Machine Works	Supplies	3456	63 65
	Columbus Mine & Mill Supply Co	Hose, etc	3457	259 78
	Columbus Supply Co	Supplies	3458	25 60
	Champlin Printing Co	Printing	3459	37 85
	D. H. Derflinger	Gasoline	3460	5 50
	E. Doddington & Co	Lumber	3461	103 20
	Engelke & Bigelow	Freight and cartage	3462	32 57
	Electric Supply & Construction Co	Supplies	3463	4 12
	Erner Hopkins Co	Electrical supplies	3464	29 93
	Ferree & Son	Ice	3465	4 25
	Henry Goldsmith	Music supplies	3466	6 20
	Hann & Adair	Printing	3467	4 40
	N. C. Hager	Groceries	3468	6 35
	Fred J. Heer	Envelopes	3469	7 15
	W. A. Jones	Feed	3470	18 65
	Jeffrey Mfg. Co	Varnish	3471	3 50
	Kauffman-Lattimer Co	Drugs and chemicals	3472	150 22
	Kretol Chemical Co	One barrel Kretol	3473	61 25
	Kelton & Converse	Lumber	3474	47 88
	Oscar S. Lear	Stencil paper	3475	2 00
	Logan McCormick	Frames	3476	11 50
	McClelland & Co	Supplies	3477	4 05
	Nitschke Bros	Printing	3478	26 85
	Ohio State Journal Co	Advertising	3479	1 00
	James Penn	Feed and hauling	3480	13 79
	Chas. J. Palmer	Repairing	3481	66 84
	Payne-McDonald Hardware Co	Hardware	3482	11 62
	Standard Oil Co	Oil	3483	22 54
	O. L. Skinner & Co	Water baths	3484	4 80
	Spahr & Glenn	Printing	3485	27 00
	Schoedinger, Fearn & Co	Hardware	3486	8 79
	Tallmadge Hardware Co	Hardware	3487	11 75
	Wilkin Redman Co	Tuning piano	3488	5 00
	American Typefounders' Co	Cabinet	3489	12 00
	American Arichitect & Building News Co	Advertising	3490	26 25
	W. H. Anderson & Co	Reports	3491	14 00
	C. W. Bardeen	Journal	3492	18 00
	R. R. Bowker	Literary Index	3493	3 50
	Burrows Bros. Co	Books	3494	17 35
	Boston Book Co	Books	3495	50 00
	J. Carbutt	Plates	3496	128 92
	M. W. Crowner	Work	3497	6 86
	Chicago Laboratory Supply & Scale Co	Supplies	3498	52 64
	Babcock & Wilcox Co	Expenses	3499	52 90
	Alvah S. Dook	Examining surveys	3500	2 00
	C. H. Evans & Co	Advertising	3501	5 00

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1902				
May 9	Eastwood Wire Mfg. Co.	Supplies	3502	5 12
	Emil Greiner	Tubes	3503	13 00
	Edw. L. Greene	Publications	3504	1 30
	L. H. Goddard	Day book	3505	75
	Keasbey & Mattison Co.	Supplies	3506	41 37
	Knauth, Nachod & Kuhne	Acct. Otto Harrassowitz	3507	1 40
	The Lunkenheimer Co.	Supplies	3508	14 71
	Library Bureau	Pens	3509	2 00
	Jas. McCrea & Co.	Gaskets and clamps	3510	14 81
	Wm. H. Pierce & Co.	Pictures	3511	22 00
	Queen & Co.	Lenses	3512	5 25
	S. H. Ruhlen	Hay	3513	26 00
	S. Singer	Books	3514	4 00
	Statute Law Book Co.	U. S. Statutes	3515	46 00
	G. E. Stechert	Books	3516	150 81
	Arthur H. Thomas Co.	Water baths	3517	21 00
	D. A. Tompkins	Publications	3518	16 00
	Henry Troemner	Balance	3519	134 40
	Western Kieley Steam Specialty Co	Traps	3520	35 00
	Worcester Machine Screw Co.	Supplies	3521	2 10
	Webb Stationery and Printing Co.	Copy books	3522	3 50
	Westinghouse, Church, Kerr & Co.	Oil	3523	7 80
	Western Electric Instrument Co.	Repair voltmeter	3524	5 50
	Westinghouse Electric and Mfg. Co.	Repairing controller, etc.	3525	54 75
	Geo. Feick	Estimates Nos. 6 and 7 law building	3526	8,021 10
	A. H. Heller	April salary	3527	150 00
12	R. M. Rownd, P. M.	Postage deposit	3528	15 00
	Lily Weeks	Salary	3529	6 00
	Columbus Railway Co.	Car tickets	3530	5 00
13	Curtis Wilkin	Records Virginia military lands	3531	50 00
14	Lloyd Yost	April salary	3532	15 00
	Chas. J. Cruse	Two gross steel pens	3533	3 00
19	R. M. Rownd, P. M.	Postage deposit	3534	25 00
	Lily Weeks	Salary	3535	6 00
	E. A. Kemmler	Instruction civil engineer department	3536	100 00
20	Central Union Telephone Co.	Telephone rent	3537	5 00
	Columbus Gas Co.	April gas	3538	189 68
	Western Union Telegraph Co.	Telegrams	3539	1 94
29	Thos. F. Hunt	May salary	3540	250 00
	John W. Decker	May salary	3541	160 00
	Frank Ruhlen	May salary	3542	75 00
	F. E. Hamilton	May salary	3543	50 00
	M. F. Miller	May salary	3544	80 00
	H. A. Weber	May salary	3545	225 00
	A. E. Vinson	May salary	3546	90 00
	Rudolph Hirsch	May salary	3547	30 00

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1902				
May 29	Geo. W. Knight	May salary	3548	250 00
	T. C. Smith	May salary	3549	120 00
	A. H. Tuttle	May salary	3550	100 00
	A. M. Bleile	May salary	3551	225 00
	Chas. B. Morrey	May salary	3552	120 00
	M. Dresbach	May salary	3553	50 00
	W. C. Mills	May salary	3554	40 00
	H. C. Lord	May salary	3555	225 00
	C. G. Conley	May salary	3556	30 00
	W. A. Kellerman	May salary	3557	225 00
	J. H. Schaffner	May salary	3558	120 00
	J. C. Bridwell	May salary	3559	25 00
	Elma B. Perry	May salary	3560	25 00
	F. J. Tyler	May salary	3561	25 00
	O. E. Jennings	May salary	3562	45 00
	S. A. Norton	May salary	3563	125 00
	Wm. McPherson	May salary	3564	225 00
	W. E. Henderson	May salary	3565	140 00
	C. W. Foulk	May salary	3566	110 00
	C. P. Linville	May salary	3567	30 00
	W. L. Dubois	May salary	3568	30 00
	H. T. Hance	May salary	3569	30 00
	C. E. Sherman	May salary	3570	140 00
	W. L. Davies	May salary	3571	50 00
	E. E. Harrold	May salary	3572	85 00
	R. W. Funk	May salary	3573	45 00
	Edw. Orton, Jr	May salary	3574	200 00
	A. V. Bleininger	May salary	3575	100 00
	M. A. Stoner	May salary	3576	180 00
	C. P. Souther	May salary	3577	120 00
	J. N. Bradford	May salary	3578	200 00
	Thos. E. French	May salary	3579	140 00
	Thos. K. Lewis	May salary	3580	100 00
	Silas Martin	May salary	3581	100 00
	J. H. Vosskuehler	May salary	3582	100 00
	F. C. Clark	May salary	3583	200 00
	J. E. Hagerty	May salary	3584	110 00
	Grace L. Pitts	May salary	3585	30 00
	D. R. Major	May salary	3586	150 00
	F. C. Caldwell	May salary	3587	180 00
	F. A. Fish	May salary	3588	100 00
	J. P. Covan	May salary	3589	80 00
	R. E. McIntosh	May salary	3590	15 00
	A. C. Barrows	May salary	3591	225 00
	J. R. Taylor	May salary	3592	140 00
	W. H. Siebert	May salary	3593	160 00
	C. S. Prosser	May salary	3594	180 00
	J. A. Bownocker	May salary	3595	150 00
	E. A. Eggers	May salary	3596	225 00
	C. W. Mesloh	May salary	3597	140 00
	B. A. Eisenlohr	May salary	3598	80 00
	J. R. Smith	May salary	3599	225 00
	A. W. Hodgman	May salary	3600	140 00
	W. S. Elden	May salary	3601	120 00
	W. R. Lazenby	May salary	3602	225 00
	V. H. Davis	May salary	3603	62 50
	F. E. Sanborn	May salary	3604	200 00
	W. A. Knight	May salary	3605	120 00

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1902				
May 29	W. H. Renck	May salary	3606	100 00
	C. P. Crowe	May salary	3607	100 00
	C. S. Van Dyke	May salary	3608	30 00
	S. C. Derby	May salary	3609	225 00
	Wm. F. Hunter	May salary	3610	250 00
	J. H. Collins	May salary	3611	20 00
	J. A. Shauck	May salary	3612	50 00
	E. B. Kinkead	May salary	3613	120 00
	W. H. Page	May salary	3614	180 00
	E. O. Randall	May salary	3615	70 00
	Olive Jones	May salary	3616	135 00
	F. A. Bohn	May salary	3617	50 00
	Harriet Townshend	May salary	3618	55 00
	Gertrude Kellicott	May salary	3619	55 00
	Maude Jeffrey	May salary	3620	55 00
	C. B. Guittard	May salary	3621	55 00
	C. G. Eckhardt	May salary	3622	20 00
	Elizabeth Smythe	May salary	3623	40 00
	R. D. Bohannon	May salary	3624	225 00
	Geo. W. McCoard	May salary	3625	160 00
	J. E. Boyd	May salary	3626	150 00
	C. L. Arnold	May salary	3627	120 00
	H. W. Kukn	May salary	3628	100 00
	S. E. Rasor	May salary	3629	90 00
	J. F. Travis	May salary	3630	30 00
	K. D. Swartzel	May salary	3631	120 00
	Wm. T. Magruder	May salary	3632	225 00
	E. A. Hitchcock	May salary	3633	175 00
	Geo. W. Frost	May salary	3634	60 00
	A. F. Hall	May salary	3635	66 66
	N. W. Lord	May salary	3636	200 00
	E. E. Somermeier	May salary	3637	100 00
	A. D. Sproat	May salary	3638	25 00
	Gustav Bruder	May salary	3639	20 00
	F. A. Ray	May salary	3640	200 00
	Geo. B. Kauffman	May salary	3641	200 00
	C. A. Dye	May salary	3642	100 00
	W. H. Scott	May salary	3643	225 00
	T. H. Haines	May salary	3644	120 00
	A. E. Davies	May salary	3645	90 00
	C. P. Linhart	May salary	3646	160 00
	Clara M. Berryman	May salary	3647	75 00
	Don C. Huddleson	May salary	3648	50 00
	B. F. Thomas	May salary	3649	225 00
	A. D. Cole	May salary	3650	190 00
	F. E. Kester	May salary	3651	90 00
	H. B. Brooks	May salary	3652	25 00
	J. V. Denney	May salary	3653	225 00
	W. L. Graves	May salary	3654	120 00
	G. H. McKnight	May salary	3655	120 00
	H. C. Allen	May salary	3656	120 00
	A. E. Williams	May salary	3657	30 00
	Clara C. Ewalt	May salary	3658	30 00
	F. C. McKinney	May salary	3659	30 00
	B. L. Bowen	May salary	3660	225 00
	Chas. A. Bruce	May salary	3661	140 00
	J. D. Batchelder	May salary	3662	120 00
	D. S. White	May salary	3663	180 00

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1902				
May 29	Paul Fischer	May salary	3664	180 00
	S. Sisson	May salary	3665	150 00
	O. V. Brumley	May salary	3666	75 00
	H. Osborn	May salary	3667	225 00
	J. S. Hine	May salary	3668	100 00
	F. L. Landacre	May salary	3669	100 00
	M. T. Cook	May salary	3670	30 00
	W. O. Thompson	May salary	3671	416 67
	K. H. Duncan	May salary	3672	58 33
	E. D. Cockins	May salary	3673	60 00
	Helen R. Powell	May salary	3674	35 00
	Carl E. Steeb	May salary	3675	75 00
	Edith R. Hubler	May salary	3676	33 33
	Wm. C. McCracken	May salary	3677	150 00
	Wm. A. Standley	May salary	3678	58 33
	W. H. Case	May salary	3679	50 00
	Benj. LeBay	May salary	3680	50 00
	Thos. Boude	May salary	3681	50 00
	Fred B. Brewer	May salary	3682	50 00
	Marion Peck	May salary	3683	45 00
	Geo. R. Rose	May salary	3684	70 00
	Earl Kimmel	May salary	3685	20 00
	John Ricketts	May salary	3686	33 75
	Thos. E. Osburn	May salary	3687	33 75
	James Kelley	May salary	3688	30 00
	Chas. W. Hicks	May salary	3689	45 00
	G. A. Goodspeed	May salary	3690	40 00
	F. E. Fleischer	May salary	3691	40 00
	John Brown	May salary	3692	25 00
	John Brown	May salary	3693	15 00
	J. K. Pritner	May salary	3694	40 00
	Wm. R. Whitestine	May salary	3695	40 00
	W. R. Thomas	May salary	3696	40 00
	Harry Chantler	May salary	3697	40 00
	G. C. Denny	May salary	3698	40 00
	M. N. Cook	May salary	3699	40 00
	Wm. Conklin	May salary	3700	40 00
	H. M. Templin	May salary	3701	40 00
	Wash Townsell	May salary	3702	25 00
	H. H. Hamilton	May salary	3703	12 50
	E. G. Bailey	May salary	3704	18 00
	R. M. Martin	May salary	3705	20 00
	F. E. Beutler	May salary	3706	12 50
	Laurel Hill	May salary	3707	33 33
	C. H. Woodruff	May salary	3708	65 00
	W. C. Weir	May salary	3709	25 00
	James Mitchell	May salary	3710	40 00
	Mildred Watters	May salary	3711	30 00
	Sarah Barrows	May salary	3712	15 00
	M. J. Kellenberger	May salary	3713	25 00
	F. H. Eno	May salary	3714	150 00
	A. H. Heller	May salary	3715	150 00
	T. W. Stone	May salary	3716	15 00
	Lloyd Yost	May salary	3717	15 00
27	Ohio National Bank	Interest due June 1 on $70,000 Bonds	3718	1,575 00
	L. F. Kiesewetter, Treas.	Interest due June 1 on $50,000 Bonds	3719	1,125 00

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1902				
May 27	Hayden-Clinton Nat'l Bank	Interest due June 1 on $40,000 Bonds	3720	3,900 00
	T. J. Godfrey	Expenses	3721	19 35
	Mrs. C. N. Brown	Salary of late Prof. Brown to June 30	3722	675 00
	Lily Weeks	Salary	3723	6 00
29	E. A. Eggers	June salary	3724	225 00
	O. V. Brumley	June salary	3725	75 00
	Earl Conway	May salary	3726	22 00
	W. F. Coover	Laboratory	3727	25 00
31	Hayden-Clinton Nat'l Bank	Bonds due May 31st	3728	10,000 00
June 2	J. E. Bender	Fees at clinic	3729	19 72
	Lily Weeks	Salary	3730	6 00
4	R. M. Rownd, P. M.	Postage stamps	3731	25 00
14	Thos. F. Hunt	June salary	3732	250 00
9	John W. Decker.....t.	June salary	3733	160 00
	Frank Ruhlen	June salary	3734	75 00
	F. E. Hamilton	June salary	3735	50 00
	M. F. Miller	June salary	3736	80 00
19	H. A. Weber	June salary	3737	225 00
	A. E. Vinson	June salary	3738	90 00
	Rudolph Hirsch	June salary	3739	30 00
	Geo. W. Knight	June salary	3740	250 00
	T. C. Smith	June salary	3741	120 00
	A. H. Tuttle	June salary	3742	100 00
	A. M. Bleile	June salary	3743	225 00
	Chas. B. Morrey	June salary	3744	120 00
	M. Dresbach	June salary	3745	50 00
	W. C. Mills	June salary	3746	40 00
	H. C. Lord	June salary	3747	225 00
23	J. Warren Smith	June salary	3748	100 00
16	C. G. Conley	June salary	3749	30 00
20	W. A. Kellerman	June salary	3750	225 00
14	J. H. Schaffner	June salary	3751	120 00
13	J. C. Bridwell	June salary	3752	25 00
	Elma B. Perry	June salary	3753	25 00
17	F. J. Tyler	June salary	3754	25 00
23	O. E. Jennings	June salary	3755	45 00
12	S. A. Norton	June salary	3756	125 00
20	Wm. McPherson	June salary	3757	225 00
12	W. E. Henderson	June salary	3758	140 00
15	C. W. Foulk	June salary	3759	110 00
12	C. P. Linville	June salary	3760	30 00
	W. L. Dubois	June salary	3761	30 00
14	H. T. Hance	June salary	3762	30 00
11	C. E. Sherman	June salary	3763	140 00
	W. L. Davies	June salary	3764	50 00
	E. E. Harrold	June salary	3765	85 00
19	R. W. Funk	June salary	3766	45 00
	Edw. Orton, Jr	June salary	3767	200 00
23	A. V. Bleninger	June salary	3768	100 00
	M. A. Stoner	June salary	3769	180 00
16	J. N. Bradford	June salary	3770	200 00
13	Thos. E. French	June salary	3771	140 00
	Silas Martin	June salary	3772	100 00
	J. H. Vosskuehler	June salary	3773	100 00

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1902				
June 13	F. C. Clark	June salary	3774	200 00
	J. E. Hagerty	June salary	3775	110 00
	Grace L. Pitts	June salary	3776	30 00
23	D. R. Major	June salary	3777	150 00
20	F. C. Caldwell	June salary	3778	180 00
13	F. A. Fish	June salary	3779	100 00
23	J. P. Covan	June salary	3780	80 00
14	R. E. McIntosh	June salary	3781	15 00
	A. C. Barrows	June salary	3782	225 00
23	J. R. Taylor	June salary	3783	140 00
	W. H. Siebert	June salary	3784	160 00
14	Chas. S. Prosser	June salary	3785	180 00
18	J. A. Bownocker	June salary	3786	150 00
13	C. W. Mesloh	June salary	3787	140 00
11	B. A. Eisenlohr	June salary	3788	80 00
	J. R. Smith	June salary	3789	225 00
	A. W. Hodgman	June salary	3790	140 00
	W. S. Elden	June salary	3791	120 00
23	W. R. Lazenby	June salary	3792	225 00
14	V. H. Davis	June salary	3793	62 50
17	F. E. Sanborn	June salary	3794	200 00
23	W. A. Knight	June salary	3795	120 00
	W. H. Renck	June salary	3796	100 00
	C. P. Crowe	June salary	3797	100 00
14	C. S. Van Dyke	June salary	3798	30 00
19	S. C. Derby	June salary	3799	225 00
14	Wm. F. Hunter	June salary	3800	250 00
13	J. H. Collins	June salary	3801	20 00
	J. A. Shauck	June salary	3802	50 00
16	E. B. Kinkead	June salary	3803	120 00
14	W. H. Page	June salary	3804	180 00
23	E. O. Randall	June salary	3805	70 00
13	Olive Jones	June salary	3806	135 00
	F. A. Bohn	June salary	3807	50 00
20	Harriet Townshend	June salary	3808	55 00
23	Gertrude Kellicott	June salary	3809	55 00
	Maude Jeffrey	June salary	3810	55 00
	C. B. Guittard	June salary	3811	55 00
13	E. G. Eckhardt	June salary	3812	20 00
23	Elizabeth Smythe	June salary	3813	40 00
9	R. D. Bohannon	June salary	3814	225 00
	Geo. W. McCoard	June salary	3815	160 00
19	Jas. E. Boyd	June salary	3816	150 00
11	C. L. Arnold	June salary	3817	120 00
23	H. W. Kuhn	June salary	3818	100 00
	S. E. Rasor	June salary	3819	90 00
11	J. F. Travis	June salary	3820	30 00
14	K. D. Swartzel	June salary	3821	120 00
23	W. T. Magruder	June salary	3822	225 00
19	E. A. Hitchcock	June salary	3823	175 00
18	Geo. W. Frost	June salary	3824	60 00
17	A. F. Hall	June salary	3825	66 74
19	N. W. Lord	June salary	3826	200 00
	E. E. Somermeier	June salary	3827	100 00
14	A. D. Sproat	June salary	3828	25 00
	Gustav Bruder	June salary	3829	20 00
20	F. A. Ray	June salary	3830	200 00
	Geo. B. Kauffman	June salary	3831	200 00

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1902				
June 12	C. A. Dye	June salary	3832	100 00
	W. H. Scott	June salary	3833	225 00
19	T. H. Haines	June salary	3834	120 00
	A. E. Davies	June salary	3835	90 00
14	C. P. Linhart	June salary	3836	160 00
6	C. M. Berryman	June salary	3837	75 00
13	D. C. Huddleson	June salary	3838	50 00
19	B. F. Thomas	June salary	3839	225 00
11	A. D. Cole	June salary	3840	190 00
17	F. E. Kester	June salary	3841	90 00
11	H. B. Brooks	June salary	3842	25 00
6	J. V. Denney	June salary	3843	225 00
13	W. L. Graves	June salary	3844	120 00
11	G. H. McKnight	June salary	3845	120 00
7	H. C. Allen	June salary	3846	120 00
11	Anna Williams	June salary	3847	30 00
	Clara C. Ewalt	June salary	3848	30 00
23	Frank C. McKinney	June salary	3849	30 00
9	B. L. Bowen	June salary	3850	225 00
23	Chas. A. Bruce	June salary	3851	140 00
19	J. D. Batchelder	June salary	3852	120 00
20	D. S. White	June salary	3853	180 00
23	Paul Fischer	June salary	3854	180 00
20	S. Sisson	June salary	3855	150 00
23	Effie Duncan	Clerical work	3856	5 07
16	Herbert Osburn	June salary	3857	225 00
	Jas. S. Hine	June salary	3858	100 00
	F. L. Landacre	June salary	3859	100 00
13	M. T. Cook	June salary	3860	30 00
23	W. O. Thompson	June salary	3861	416 63
6	Alexis Cope	June salary	3862	187 50
20	K. H. Duncan	June salary	3863	58 37
23	E. D. Cockins	June salary	3864	60 00
	Helen R. Powell	June salary	3865	35 00
20	Carl E. Steeb	June salary	3866	75 00
17	E. R. Hubler	June salary	3867	33 37
23	Wm. C. McCracken	June salary	3868	150 00
19	Wm. Standley	June salary	3869	58 37
23	W. H. Cook	June salary	3870	50 00
	Benj. LeBay	June salary	3871	50 00
	Thos. Boude	June salary	3872	50 00
	Fred B. Brewer	June salary	3873	50 00
	Marion Peck	June salary	3874	45 00
	Geo. R. Rose	June salary	3875	70 00
	Earl Kimmel	June salary	3876	20 00
	John Ricketts	June salary	3877	45 00
	T. E. Osburn	June salary	3878	45 00
	James Kelley	June salary	3879	30 00
	Chas. M. Hicks	June salary	3880	45 00
	G. A. Goodspeed	June salary	3881	40 00
	W. R. Thomas	June salary	3882	40 00
	Wm. Whitestine	June salary	3883	40 00
	H. Chantler	June salary	3884	40 00
	G. C. Denny	June salary	3885	40 00
	John Brown	June salary	3886	15 00
	John Brown	June salary	3887	25 00
	M. N. Cook	June salary	3888	40 00
	H. M. Templin	June salary	3889	40 00

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1902				
June 23	W. Townsell	June salary	3890	25 00
	H. H. Hamilton	June salary	3891	12 50
	E. G. Bailey	June salary	3892	18 00
	R. M. Martin	June salary	3893	20 00
	F. E. Beutler	June salary	3894	12 50
	Laurel Hill	June salary	3895	33 37
	Lloyd Yost	June salary	3896	15 00
	T. W. Stone	June salary	3897	15 00
	A. H. Heller	June salary	3898	150 00
	F. H. Eno	June salary	3899	150 00
	M. J. Kellenberger	June salary	3900	25 00
12	Sarah Barrows	June salary	3901	15 00
23	Mildred Watters	June salary	3902	30 00
19	W. H. Page	Instruction in law	3903	210 00
23	W. C. Weir	June salary	3904	25 00
	C. H. Woodruff	June salary	3905	65 00
5	F. C. Caldwell	Petty cash items	3906	4 96
	H. J. A. Gerard	Guide service	3907	11 00
6	F. R. Kunkle	Student labor	3908	17 18
	E. W. Tanner	Student labor	3909	4 50
	Lily Weeks	Salary	3910	6 00
	G. O. Thompson	Campus work	3911	1 25
	Miller's Fair	Tray	3912	1 00
	G. A. Crabb	Campus work	3913	1 37
	E. N. Webb	Student work	3914	10 00
	E. Wallace	Labor	3915	12 00
7	J. E. Bard	Student labor	3916	2 68
	C. D. Shoemaker	Battalion clerk	3917	10 00
	E. P. Feicht	Student labor	3918	5 55
	J. P. Pratt	Work in library	3919	5 25
9	W. T. Atherton	Campus work	3920	2 00
	C. P. Burkey	Library work	3921	9 60
	Ethel Baldwin	Assistance	3922	1 50
	J. H. Beattie	Campus work	3923	1 25
	E. T. Clapp	Student labor	3924	3 13
7	W. A. Hite	Library work	3925	9 65
	C. C. Fauver	Labor	3926	10 84
	Carl Hagerman	Campus work	3927	5 37
	J. A. Stiver	Guide service	3928	12 87
	O. F. Metz	Student labor	3929	12 90
	Herbert Huddleson	Campus work	3930	1 00
9	C. M. Curtis	Campus work	3931	2 37
	Fred Cashner	Campus work	3932	19 50
	J. V. Denney	Expenses	3933	11 25
	F. I. Downs	Campus work	3934	1 25
	C. Eckman	Campus work	3935	9 90
	T. E. French	Engrossing commissions	3936	4 60
	Chas. H. Flory	Student assistance	3937	29 38
	L. W. Funk	Work in store room	3938	8 25
	J. A. Frederick	Campus work	3939	3 06
	W. D. Griffith	Campus work	3940	3 00
	A. L. Harrington	Student labor	3941	5 00
	Eva Harrington	Library work	3942	5 50
	C. L. Henderson	Student labor	3943	7 50
	D. L. Hurst	Campus work	3944	23 25
	Jessie B. Karns	Stenographic services	3945	16 00
	W. R. Lazenby	Graduate	3946	1 25
	Chas. G. Lewis	Student labor	3947	14 60

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1902				
June 9	L. R. Lee	Campus work	3948	1 87
	Frank C. Long	Books	3949	19 13
	Ida Marshall	Library work	3950	2 60
	W. T. Magruder	Belt	3951	3 42
	E. R. Minns	Campus work	3952	5 00
	B. W. Maugun	Campus work	3953	7 68
	C. C. Poindexter	Student labor	3954	7 50
	H. M. Plum	Student labor	3955	5 75
	C. F. Ridgley	Guide service	3956	9 38
	C. E. Sherman	Expenses	3957	8 40
	Metta L. Seymour	Typewriting	3958	90
	Edith Seymour	Music	3959	12 00
	L. M. Smith	Campus work	3960	1 25
	T. H. Tangemann	Library work	3961	9 25
	D. S. White	Supplies	3962	13 95
	S. J. Weaver	Campus work	3963	2 62
	T. L. Wheeler	Hardware	3964	15 06
10	J. S. Abbott & Co.	Hardware	3965	9 18
	C. D. Ashcroft	Gold badges	3966	25 00
9	C. A. McGrew	Battalion clerk	3967	10 00
10	Artura Photo Paper Co.	Paper	3968	19 95
	Blackwood, Green & Co.	Tanks	3969	5 49
	H. Braun Sons & Co.	Supplies	3970	120 49
9	Thos. K. Lewis	June salary	3971	100 00
	C. P. Souther	Supplies	3972	1 58
	M. A. Stoner	Department supplies	3973	7 00
	H. O. Buman	Student labor	3974	2 36
10	W. F. Coover	Laboratory assistance	3975	40 00
	Wm. Burdell	Supplies	3976	16 50
	Samuel Butler & Co.	Soap	3977	5 22
	Buckeye Brass Foundry.	Casting	3978	18 92
	Blackwood, Green & Co.	Hardware	3979	8 46
	Bowden Towel Supply Co.	Towel service	3980	29 42
	Bucher Engraving Co.	Half tones	3981	45 93
	Columbus Photo Supply Co.	Photo supplies	3982	19 84
	G. W. Clarke & Co.	Oak pieces	3983	2 00
	Columbus Machine Co.	Gas bag	3984	4 50
	Champlin Printing Co.	Printing	3985	49 75
	G. D. Cross Lumber Co.	Rough pine	3986	18 47
	Columbus Dry Goods Co.	Notions	3987	2 47
	Columbus Bank Note Co.	Diplomas	3988	97 50
	Columbus Lithographing Co.	Bonds	3989	35 00
	Capital City Machine Works	Steel, etc.	3990	4 90
	Columbus Mine & Mill Supply Co.	Waste	3991	26 13
	Columbus Supply Co.	Supplies	3992	17 40
	Erner-Hopkins Co	Electrical supplies	3993	10 72
	Engelke & Bigelow	Freight and cartage	3994	30 39
	Frankenberg Bros.	Trays	3995	15 00
	H. L. Fishback & Co.	One gas hot-plate	3996	50
	Gilliam & Minshall	Coal	3997	57 60
	Griswold-Sohl Co.	Iron and steel	3998	27 08
	John H. Grove	Insurance	3999	34 00
	Howald & Conklin	Desk and tables	4000	21 00

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1902				
June 9	R. M. Rownd, P. M.	Postage stamps	4001	30 00
10	N. C. Hager	Groceries	4002	12 92
	Chas. B. Hood	Brushes	4003	13 25
	G. H. Hopper	Meals, etc	4004	35 25
	Fred J. Heer	Printing	4005	101 00
	Kelton & Converse	Lumber	4006	3 80
	Lawrence Press Co	Printing	4007	5 25
	Oscar S. Lear	Repairs and supplies	4008	2 75
	M. C. Lilley & Co	Supplies	4009	33 05
	J. W. Meek & Co	Repairs	4010	1 85
	Robert A. McClure	Wands	4011	3 50
	Ohio Valley Press	Cyclopedia	4012	5 00
	Ohio State Journal Co.	Bond advertisement	4013	9 60
	T. J. O'Neil	Duck	4014	58 80
	Ohio Leather Co	Leather	4015	1 25
	W. W. Hackney	Mimeographing	4016	45
	James Penn	Hauling and feed	4017	18 01
	Ruggles-Gale Co	Pens and pencils	4018	7 75
	Spahr & Glenn	Printing	4019	6 00
	Seraphim Blank Book Co	Binding	4020	57 85
	Southard Novelty Co	Printing	4021	14 75
	Schoedinger, Fearn & Co	Hardware	4022	2 32
	Tracy-Wells Co	Brooms	4023	2 25
	Tallmadge Hardware Co.	Hardware	4024	3 05
	Z. L. White & Co	Supplies	4025	2 52
	W. H. Anderson & Co.	Reports	4026	7 75
	American Aristotype Co.	Photo supplies	4027	23 50
	Apfel-Murdock Co.	Slides	4028	4 10
	Boston Book Co	Books	4029	21 30
	Bausch & Lomb Optical Co	Supplies	4030	886 03
	Jas. G. Biddle	Apparatus	4301	63 16
	Buffalo Forge Co	Centerplate, etc	4032	8 00
	J. R. C. Brown	Engineering News	4033	75 00
	Burrows Bros. Co	Books	4034	14 58
	Cutter Electric & Manufacturing Co	Supplies	4035	57 15
	Cumulative Index Co.	Index	4036	10 00
	T. H. Castor & Co	Books	4037	3 23
	Dodd, Mead & Co	Year Book	4038	4 80
	Eimer & Amend	Supplies	4039	60 18
	F. Fritsch Mfg. Co	Grates	4040	9 00
	Holcomb Mfg. Co	Brushes	4041	67 45
	J. P. Haney, Secretary.	Year Book	4042	3 00
	Jarecki Mfg. Co	Filter material	4043	3 50
	F. L. Keiser	Band service	4044	15 00
	E. H. Kellogg & Co	Cylinder oil	4045	28 35
	Chas. E. Lauriet Co	Dickens	4046	18 00
	N. Y. Botanical Garden.	Books	4047	1 75
	Herbert Putnam, Libra'n	Catalogue cards	4048	150 00
	Chas. Scribner's Sons	Books	4049	6 20
	G. E. Stechert	Books	4050	253 80
	Chas. L. Smith	Books	4051	3 31
	Ward's National Science Establishment	Mounting seal	4052	62 75

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STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1902				
June 10	John E. Bender	Fees as clerk at veterinary clinic	4053	10 00
	John E. Bender	Fees as clerk at veterinary clinic	4054	29 85
	John T. Mack	Expenses as trustee	4055	12 75
	R. M. Rownd, P. M.	Postage stamps	4056	75 00
	Cornelia P. Souther	June salary	4057	120 00
	Jean Pratt	Library work	4058	2 62
	J. A. G. Whetzel	Quartermaster fee	4059	5 00
11	F. C. Caldwell	Department supplies	4060	4 85
12	A. G. Geren	Supplies	4061	3 46
	W. F. Kern	Laboratory work	4062	9 00
	E. L. Orndorff	Laboratory assistance	4063	3 00
	Bishop, Jones & Co.	Box	4064	4 00
	Columbus Gas Co.	May gas	4065	194 25
	H. Cole Co.	Supplies	4066	4 50
	Columbus Wire & Iron Works	Guards, etc.	4067	12 00
	Western Union Telegraph Co.	Telegrams	4068	5 78
	Bourne & Knowles Mfg. Co.	Gaskets	4069	55
	Sipe & Sigler	Jar	4070	84
	H. W. Johns Mfg. Co.	Asbestos roofing	4071	154 44
	Watertown Engine Co.	Balance due on engine	4072	724 59
	W. A. Hite	Student labor	4073	3 75
	R. M. Rownd, P. M.	Stamps	4074	15 09
	J. C. Royan, Jr., Mgr.	Adv. in Makio	4075	50 00
13	George Feick	Estimate No. 8, law building	4076	4,973 25
	T. H. Tangemann	Student labor	4077	4 50
	C. P. Burkey	Labor in library	4078	5 00
14	C. S. Van Dyke	Student labor	4079	6 00
	Ora F. Metz	Student labor	4080	7 13
	E. Wallace	Student labor	4081	7 35
16	H. J. A. Gerard	Guide service	4082	6 18
17	James S. Hine	Acct. Ohio Naturalist	4083	45 00
	W. F. Coover	Laboratory assistance	4084	50 00
	W. F. Coover	Laboratory assistance	4085	25 00
18	D. M. Massie	Expenses	4086	45 20
	W. O. Thompson	Honorarium for Dr. Gilbert	4087	60 00
	W. O. Thompson	Honorarium for Dr. Brumbaugh	4088	100 00
	Alma H. Wacker	Student assistance	4089	16 66
20	Curtis Wilkin	Examining records	4090	2 00
	Chas. H. Bryant	Cleaning vault	4091	14 00
	R. M. Rownd, P. M.	Postage stamps	4092	3 00
21	W. Stillman Dutton	Architects fees	4093	124 33
	Olive Jones	Money advanced	4094	5 00
23	Jno. T. Mack	Expenses as trustee	4095	20 60
25	Scott A. Webb, Admr.	Library and apparatus of Prof. Brown, deceased.	4096	326 65
	Western Union Telegraph Co.	Telegrams	4097	1 09
26	R. M. Rownd, P. M.	Postage stamps	4098	16 75
	Earl Conway	June salary	4099	20 00
	F. C. Caldwell	Petty cash items	4100	4 76
27	A. L. Harrington	Wiring	4101	35 24

STATEMENT II—Concluded.

Date.	To whom paid.	For what purpose.	No.	Amount.
1902				
June 27	L. H. Strom	Wiring	4102	11 40
	W. H. Kempton	Wiring	4103	10 34
	J. M. Battenfield	Wiring	4104	3 67
28	L. D. Fauver	Janitor work	4105	15 45
30	F. W. Prentiss, Treas.	Balance on hand June 30, 1902	4106	13,830 71
		Total		$420,006 40

STATEMENT III.

In compliance with Section 7 of the *Organic Act*, passed by the Legislature of Ohio, May 1, 1878 (Bates' Annotated Statutes, Sec. 4105–41), which requires the list of "the number of professors, officers, teachers and other employes, and the compensation of each, to be annually reported," I submit the following:

Name of Employe.	Position.	Salary.
Wm. Oxley Thompson.	President	$5,000 00
William Henry Scott...	Professor of Philosophy	2,250 00
Sidney A. Norton.....	Emeritus Professor and Lecturer in General Chemistry	1,250 00
Nathaniel W. Lord.....	Professor of Metallurgy and Mineralogy	2,000 00
Samuel C. Derby.....	Professor of Latin	2,250 00
William R. Lazenby....	Professor of Horticulture and Forestry	2,250 00
Josiah R. Smith.....	Professor of Greek	2,250 00
Henry A. Weber.....	Professor of Agricultural Chemistry	2,250 00
Benjamin F. Thomas...	Professor of Physics	2,250 00
George W. Knight.....	Professor of American History and Political Science	2,500 00
Rosser D. Bohannon...	Professor of Mathematics	2,250 00
*C. Newton Brown.....	Professor of Civil Engineering	2,250 00
Ernst August Eggers..	Professor of Germanic Language and Literature	2,250 00
Albert M. Bleile.....	Professor of Anatomy and Physiology	2,250 00
William A. Kellerman..	Professor of Botany	2,250 00
Thomas F. Hunt.....	Professor of Agriculture and Dean of the College of Agirculture	2,250 00
George B. Kauffman...	Professor of Pharmacy	2,000 00
Benjamin L. Bowen....	Professor of Romance Languages	2,250 00
Joseph V. Denney.....	Professor of Rhetoric and English Language.	2,250 00
Allen C. Barrows.....	Professor of English Literature	2,250 00
Edward Orton, Jr.....	Professor and Director of Clay Working and Ceramics	2,000 00
William F. Hunter.....	Professor of Law and Dean of the College of Law	2,500 00
James H. Collins.....	Professor of Law	200 00
Emilius O. Randall....	Professor of Law	700 00
William T. Magruder...	Professor of Mechanical Engineering	2,250 00
Edgar B. Kinkead.....	Professor of Law	1,200 00
William H. Page.....	Professor of Law	1,610 00
William McPherson, Jr.	Professor of Chemistry	2,250 00
Joseph N. Bradford....	Professor of Architecture and Drawing	2,000 00
David S. White	Professor and Dean of College of Veterinary Medicine	1,800 00
Herbert Osborn.....	Professor of Zoology and Entomology	2,250 00
Christopher P. Linhart	Professor of Physical Education	1,600 00
Olive B. Jones.....	Librarian	1,350 00
Henry C. Lord	Professor of Astronomy and Director of Emerson McMillin Observatory	2,250 00
Frank E. Sanborn.....	Professor and Director of Department of Industrial Arts	2,000 00
Frank A. Ray.....	Professor of Mine Engineering	2,000 00

* Died March 6, 1902.

STATEMENT III—Continued.

Name of Employe.	Position.	Salary.
Frederick C. Clark....	Professor of Economics and Sociology.....	2,000 00
*William D. Gibbs.....	Professor of Agronomy	700 00
John A. Shauck.....	Professor of Law	175 00
Paul Fischer	Professor of Pathology	1,800 00
John W. Decker	Professor of Dairying	1,600 00
Embury A. Hitchcock..	Professor of Experimental Engineering	1,750 00
Francis C. Caldwell....	Professor of Electrical Engineering	1,800 00
Charles S. Prosser....	Professor of Geology	1,800 00
John A. Bownocker....	Professor of Inorganic Geology and Curator of Museum	1,500 00
Alfred D. Cole.....	Professor of Physics	1,900 00
James M. Butler.....	Professor of Law	140 00
Minnie A. Stoner.....	Professor of Domestic Science	1,800 00
Wilbur H. Siebert.....	Associate Professor of European History...	1,600 00
George W. McCoard....	Associate Professor of Mathematics.....	1,600 00
Charles W. Mesloh.....	Associate Professor of Germanic Language	1,400 00
Arthur W. Hodgman...	Associate Professor of Classical Languages.	1,400 00
Cornelia P. Souther....	Associate Professor of Domestic Art.....	1,200 00
Clara M. Berryman....	Associate Professor of Physical Education.	750 00
William E. Henderson.	Associate Professor of Chemistry	1,400 00
Christopher E. Sherman	Associate Professor of Civil Engineering...	1,400 00
Joseph R. Taylor.....	Associate Professor of English Literature..	1,400 00
James E. Boyd.....	Associate Professor of Mathematics.....	1,500 00
Charles A. Bruce.....	Associate Professor of Romance Languages.	1,400 00
Septimus Sisson	Associate Professor of Veterinary Medicine.	1,500 00
Thomas E. French....	Associate Professor of Architecture and Drawing	1,400 00
David R. Major.....	Associate Profesor of Education	1,500 00
J. Warren Smith.....	Lecturer on Meteorology	100 00
William L. Graves.....	Assistant Professor of Rhetoric and English Literature	1,200 00
Clair A. Dye.....	Assistant Profesor of Pharmacy	1,000 00
Charles W. Foulk.....	Assistant Professor of Chemistry	1,100 00
Charles L. Arnold.....	Assistant Professor of Mathematics	1,200 00
John H. Schaffner.....	Assistant Professor of Botany	1,200 00
Charles B. Morrey.....	Assistant Professor of Anatomy and Physiology	1,200 00
James S. Hine.....	Assistant Professor of Zoology and Entomology	1,000 00
Karl D. Swartzel.....	Assistant Professor of Mathematics	1,200 00
George H. McKnight...	Assistant Professor of Rhetoric and English Language	1,200 00
Herrick C. Allen.....	Assistant Professor of Rhetoric and English Language	1,200 00
Francis L. Landacre...	Assistant Professor of Zoology and Entomology	1,000 00
Wallace S. Elden.....	Assistant Professor of Classical Languages.	1,200 00
Fred A. Fish.....	Assistant Professor of Electrical Engineering	1,000 00
William A. Knight.....	Assistant Professor of Machine Shop Practice	1,200 00
Harry W. Kuhn.....	Assistant Professor of Mathematics	1,000 00
James E. Hagerty.....	Assistant Professor of Economics and Sociology	1,100 00
Theodore C. Smith....	Assistant Professor of American History and Political Science	1,200 00

* Resigned January 1, 1902.

STATEMENT III—Continued.

Name of Employe.	Position.	Salary.
J. D. Bachelder	Assistant Professor of Romance Languages.	1,000 00
Frederick E. Kester	Assistant Professor of Physics	900 00
Thomas H. Haines	Assistant Professor of Philosophy	1,200 00
B. B. Herrick	Instructor in Cheese-making	150 00
William H. Renck	Instructor in Pattern-making and Founding.	1,000 00
Charles P. Crowe	Instructor in Forging	1,000 00
Alonzo H. Tuttle	Instructor in American History and Political Science	1,000 00
Arthur E. Davies	Instructor in Philosophy and Education	900 00
Albert E. Vinson	Instructor in Agricultural Chemistry	900 00
Thomas K. Lewis	Instructor in Drawing	1,000 00
Silas Martin	Instructor in Drawing	1,000 00
Joseph H. Vosskuehler.	Instructor in Drawing	1,000 00
Albert V. Bleininger	Instructor in Ceramics	1,000 00
Berthold A. Eisenlohr.	Instructor in Germanic Language	800 00
Samuel E. Rasor	Instructor in Mathematics	900 00
Edward E. Somermeier	Instructor in Metallurgy and Mineralogy	1,000 00
Don Carlos Huddleson.	Instructor in Physical Education	500 00
Merritt F. Miller	Instructor in Agronomy	480 00
Frank Ruhlen	Instructor in Zootechny	900 00
A. H. Heller	Instructor in Civil Engineering	450 00
F. H. Eno	Instructor in Civil Engineering	450 00
Albert F. Hall	Machinist in Mechanical Engineering	800 00
Harriet Townshend	Assistant in Library	550 00
Maude D. Jeffrey	Assistant in Library	550 00
Gertrude S. Kellicott	Assistant in Library	550 00
Claude B. Guittard	Assistant in Library	550 00
Oliver B. Brumley	Assistant in Veterinary Medicine	750 00
D. A. Crowner	Assistant in Butter-making	200 00
Melvin Dresbach	Assistant in Anatomy and Physiology	500 00
Fred J. Tyler	Assistant in Botany	300 00
William L. Davies	Assistant in Civil Engineering	500 00
Vernon H. Davis	Assistant in Horticulture and Forestry	750 00
F. A. Bohn	Assistant Reference Librarian	500 00
George W. Frost	Assistant in Mechanical Engineering	600 00
Rudolph Hirsch	Assistant in Agricultural Chemistry	300 00
Sarah Barrows	Assistant in German	150 00
Frank E. Hamilton	Assistant in Agriculture	300 00
William C. Mills	Curator of Archaeology	480 00
Clarence P. Linville	Fellow in Chemistry	300 00
W. L. Dubois	Fellow in Chemistry	300 00
J. F. Travis	Fellow in Mathematics	300 00
John C. Bridwell	Fellow in Botany	250 00
Elma B. Perry	Fellow in Botany	250 00
Crace Lenore Pitts	Fellow in Economics and Sociology	300 00
R. D. DeWolf	Fellow in Electrical Engineering	180 00
Charles B. Sayre	Fellow in Library	80 00
Melville T. Cook	Fellow in Zoology and Entomology	300 00
Harry T. Hance	Fellow in Chemistry	300 00
C. S. Van Dyke	Fellow in Industrial Arts	300 00
Clara Converse Ewalt.	Fellow in Rhetoric and English Language	300 00
Frank C. McKinney	Fellow in Rhetoric and English Language	300 00
Anna E. Williams	Fellow in Rhetoric and English Language	300 00
C. G. Conley	Fellow in Astronomy	300 00
John R. Chamberlain	Fellow in Architecture and Drawing	180 00
Carl C. Eckhardt	Fellow in Library	120 00
R. E. McIntosh	Fellow in Electrical Engineering	120 00

STATEMENT III—Concluded.

Name of Employe.	Position.	Salary.
A. D. Sproat	Student Assistant in Metallurgy and Mine Engineering	250 00
T. W. Stone	Student Assistant in Architecture and Drawing	45 00
Lloyd Yost	Student Assistant in Architecture and Drawing	45 00
Otto E. Jennings	Florist	540 00
Alexis Cope	Secretary of Board of Trustees	2,250 00
Carl E. Steeb	Accountant	900 00
Katherine H. Duncan	Executive Clerk	700 00
Edith D. Cockins	Registrar	720 00
Edith R. Hubler	Secretary's Clerk and Stenographer	400 00
Helen R. Powell	Assistant to Registrar	350 00
W. C. McCracken	Chief Engineer	1,800 00
William Standley	First Assistant Engineer	700 00
W. H. Case	Second Assistant Engineer	600 00
Benjamin A. LeBay	Steam-fitter	600 00
Thomas Boude	First Fireman	500 00
Fred B. Brewer	Second Fireman	450 00
Marion Peck	Helper in Boiler House	450 00
George R. Rose	Plumber	840 00
Earl Kimmell	Plumber's Helper	240 00
John Ricketts	Watchman	540 00
Thomas E. Osburn	Watchman	540 00
James Kelly	Lawn Keeper	360 00
Charles M. Hicks	Janitor, University Hall	540 00
William Whitestine	Janitor, Biological Hall	480 00
George A. Goodspeed	Janitor, Chemical Hall	480 00
John Brown	Janitor, Hayes Hall	480 00
William R. Thomas	Janitor, Armory and Gymnasium	360 00
Harry Chantler	Janitor, Orton Hall	480 00
Myron N. Cook	Janitor, Townshend Hall	480 00
H. M. Templin	Janitor, Veterinary Hospital	480 00
George C. Denny	Janitor, Botanical and Horticulture Halls	480 00
D. D. Geren	Janitor, Armory and Gymnasium	120 00
F. E. Fleischer	Assistant Janitor, Armory and Gymnasium	360 00
J. K. Pritner	Assistant Janitor, Townshend Hall	240 00
William Conklin	Assistant Janitor, Orton and Chemical Halls	360 00
Ray Barton	Helper to Janitor, University Hall	140 00
Earl Conway	Helper to Janitor, University Hall	60 00
Washington Townsel	Janitor, Orton Hall	300 00
James Mitchell	Janitor, Power House	400 00
E. G. Bailey	Student Janitor, Mechanical Laboratory	180 00
H. H. Hamilton	Student Janitor, Botanical Hall	125 00
R. M. Martin	Student Janitor, Emerson McMillin Observatory	240 00
R. E. McIntosh	Student Janitor, Electrical Engineering Laboratory	75 00
F. E. Beutler	Student Janitor, Electrical Engineering Laboratory	50 00
C. H. Woodruff	Carpenter	780 00
J. P. Covan	Electrician	960 00
Laurel L. Hill	Stenographer, College of Agriculture	400 00
William C. Weir	Elevator Conductor	250 00

COLUMBUS, O., SEPT. 26, 1902.

To the Board of Trustees of the Ohio State University.

The undersigned, the finance committee, have in obedience to your instructions, examined the accounts and vouchers of L. F. Kiesewetter, the treasurer of the university, for the period from July 1, 1901 to June 30, 1902, and carefully compared them with the vouchers in possession of the secretary, and hereby certify that the report of the treasurer submitted to the board for the period named, which is the last fiscal year, is correct.

D. M. MASSIE,
PAUL JONES,
J. MCLAIN SMITH.
Finance Committee.

REPORT OF RECEIPTS AND DISBURSEMENTS OF APPROPRIATIONS MADE BY ACT OF CONGRESS AUGUST 30, 1890.

Report of Treasurer of said institution to the Secretary of Agriculture and the Secretary of the Interior, of amount received under act of Congress of August 30, 1890, in aid of Colleges of Agriculture and the Mechanic Arts, and of the disbursements thereof, to and including June 30, 1902.

	Amount.
Balance on hand July 1, 1901	$362 12
Date of receipt of installment for 1901-2, July 11, 1901	25,000 00
Total available for year ended June 30, 1902	$25,362 12
Disbursements thereof for and during the year ended June 30, 1902:	
Agriculture, as per Schedule A	$4,831 66
Mechanic Arts, as per Schedule B	6,103 32
English Language, as per Schedule C	2,080 00
Mathematical Science, as per Schedule D	2,755 00
Natural or Physical Science, as per Schedule E	8,190 00
Economic Science, as per Schedule F	1,280 00
Total expended during year	$25,239 98
Balance remaining unexpended July 1, 1902	122 14

I hereby certify that the above account is correct and true, and, together with the schedules hereunto atached, truly represents the details of expenditures for the period and by the institution named, and that said expenditures were applied only to instruction in agriculture, the mechanic arts, the English language, and the various branches of mathematical, physical, natural, and economic science, with special reference to their applications in the industries of life, and to the facilities for such instruction.

L. F. KIESEWETTER, Treasurer.

SCHEDULE A.

Disbursements for instruction in Agriculture and for facilities for such instruction during the year ended June 30, 1902.

I.—FOR SALARIES OF INSTRUCTORS.

Names of Instructors.	Subjects Taught for Which Paid From "Morrill Fund."	Amount.
Thomas F. Hunt, Professor	Agriculture	$750 00
W. D. Gibbs, Professor	Agronomy	350 00
John W. Decker, Professor	Dairying	480 00
Frank Ruhlen, Instructor	Agriculture	225 00
M. F. Miller, Instructor	Agronomy	80 00
F. E. Hamilton, Assistant	Agriculture	50 00
B. B. Herrick, Instructor	Cheese Making	50 00
D. A. Crowner, Instructor	Butter Making	66 66
H. A. Weber, Professor	Agricultural Chemistry	675 00
E. A. Vinson, Instructor	Agricultural Chemistry	270 00
Rudolph Hirsch, Assistant	Agricultural Chemistry	90 00
W. R. Lazenby, Professor	Horticulture and Forestry	450 00
Vernon H. Davis, Assistant	Horticulture and Forestry	125 00
David S. White, Professor	Veterinary Medicine	360 00
Paul Fischer, Professor	Veterinary Pathology	360 00
Septimus Sisson, Professor	Veterinary Medicine	300 00
O. V. Brumley, Assistant	Veterinary Medicine	150 00
	Total	$4,831 66

SCHEDULE B.

Disbursements for instruction in Mechanic Arts and for facilities for such instruction during the year ended June 30, 1902.

I.—FOR SALARIES OF INSTRUCTORS.

Names of Instructors.	Subjects Taught for Which Paid From "Morrill Fund."	Amount.
C. N. Brown, Professor	Civil Engineering	$450 00
C. E. Sherman, Associate Professor	Civil Engineering	280 00
W. L. Davies, Assistant	Civil Engineering	100 00
Edward Orton, Professor	Ceramics	400 00
A. V. Bleininger, Instructor	Ceramics	200 00
J. N. Bradford, Professor	Drawing	400 00
T. E. French, Associate Professor	Drawing	280 00
T. K. Lewis, Instructor	Drawing	200 00
Silas Martin, Instructor	Drawing	200 00
J. H. Vosskuehler, Instructor	Drawing	200 00
J. R. Chamberlain, Fellow	Drawing	60 00
F. C. Caldwell, Professor	Electrical Engineering	360 00
F. A. Fish, Assistant Professor	Electrical Engineering	200 00
R. D. DeWolf, Fellow	Electrical Engineering	60 00
J. P. Covan, Machinist	Electrical Engineering	160 00
F. E. Sanborn, Professor	Industrial Arts	400 00
W. A. Knight, Instructor	Machine Shop Practice	240 00
W. H. Renck, Instructor	Pattern Making	200 00
C. P. Crowe, Instructor	Forging	200 00
C. S. Van Dyke, Fellow	Industrial Arts	60 00
W. T. Magruder, Professor	Mechanical Engineering	450 00
E. A. Hitchcock, Professor	Experimental Engineering	350 00
Geo. W. Frost, Assistant	Mechanical Engineering	120 00
A. F. Hall, Machinist	Mechanical Engineering	133 32
F. A. Ray, Professor	Mine Engineering	400 00
	Total	$6,103 32

SCHEDULE C.

Disbursements for instruction in English Language and for facilities for such instruction during the year ended June 30, 1902.

I.—FOR SALARIES OF INSTRUCTORS.

Names of Instructors.	Subjects Taught for Which Paid From "Morrill Fund."	Amount.
A. C. Barrows, Professor	English Literature	$450 00
J. R. Taylor, Associate Professor	English Literature	280 00
J. V. Denney, Professor	Rhetoric and English Language	450 00
W. L. Graves, Assistant Professor	Rhetoric and English Language	240 00
Geo. H. McKnight, Assistant Professor	Rhetoric and English Language	240 00
H. C. Allen, Professor	Rhetoric and English Language	240 00
Anna E. Williams, Fellow	Rhetoric and English Language	60 00
Clara C. Ewalt, Fellow	Rhetoric and English Language	60 00
F. C. McKinney, Fellow	Rhetoric and English Language	60 00
	Total	$2,080 00

SCHEDULE D.

Disbursements for instruction in Mathematical Science and for facilities for such instruction during the year ended June 30, 1902.

I.—FOR SALARIES OF INSTRUCTORS.

Names of Instructors.	Subjects Taught for Which Paid From "Morrill Fund."	Amount.
H. C. Lord, Professor	Astronomy	$675 00
C. G. Conley, Fellow	Astronomy	90 00
R. D. Bohannon, Professor	Mathematics	450 00
Geo. W. McCoard, Associate Professor	Mathematics	320 00
J. E. Boyd, Associate Professor	Mathematics	300 00
C. L. Arnold, Assistant Professor	Mathematics	240 00
K. D. Swartzel, Assistant Professor	Mathematics	240 00
H. W. Kuhn, Assistant Professor	Mathematics	200 00
S. E. Rasor, Instructor	Mathematics	180 00
J. F. Travis, Fellow	Mathematics	60 00
	Total	$2,755 00

SCHEDULE E.

Disbursements for instruction in Natural or Physical Science and for facilities for such instruction during the year ended June 30, 1902.

I.—FOR SALARIES OF INSTRUCTORS.

Names of Instructors.	Subjects Taught for Which Paid From "Morrill Fund."	Amount.
A. M. Bleile, Professor	Anatomy and Physiology	$675 00
C. B. Morrey, Assistant Professor	Anatomy and Physiology	360 00
M. Dresbach, Assistant	Anatomy and Physiology	150 00
W. A. Kellerman, Professor	Botany	675 00
J. H. Schaffner, Assistant Professor	Botany	360 00
J. C. Bridwell, Fellow	Botany	75 00
Elma B. Perry, Fellow	Botany	75 00
F. J. Tyler, Garden Assistant	Botany	75 00
O. E. Jennings, Florist	Botany	135 00
S. A. Norton, Professor	Chemistry	375 00
Wm. McPherson, Professor	Chemistry	675 00
W. E. Henderson, Associate Professor	Chemistry	280 00
C. W. Foulk, Assistant Professor	Chemistry	220 00
C. P. Linville, Fellow	Chemistry	60 00
W. L. Dubois, Fellow	Chemistry	60 00
H. T. Hance, Fellow	Chemistry	60 00
C. S. Prosser, Professor	Geology	360 00
Jno. A. Bownocker, Professor	Inorganic Geology	300 00
N. W. Lord, Professor	Metallurgy and Mineralogy	400 00
E. E. Somermeier, Instructor	Metallurgy and Mineralogy	200 00
A. D. Sproat, Fellow	Metallurgy and Mineralogy	50 00
Geo. B. Kauffman, Professor	Pharmacy	400 00
Clair A. Dye, Assistant Professor	Pharmacy	200 00
B. F. Thomas, Professor	Physics	450 00
A. D. Cole, Professor	Physics	380 00
F. E. Kester, Instructor	Physics	180 00
H. B. Brooks, Assistant	Physics	50 00
Herbert Osborn, Professor	Zoology and Entomology	450 00
J. S. Hine, Assistant Professor	Zoology and Entomology	200 00
F. L. Landacre, Assistant Professor	Zoology and Entomology	200 00
M. T. Cook, Fellow	Zoology and Entomology	60 00
	Total	$8,190 00

SCHEDULE F.

Disbursements for instruction in Economic Science and for facilities for such instruction during the year ended June 30, 1902.

I.—FOR SALARIES OF INSTRUCTORS.

Names of Instructors.	Subjects Taught for Which Paid From "Morrill Fund."	Amount.
Minnie A. Stoner, Associate Professor	Domestic Science	$360 00
Cornelia P. Souther, Assoc. Professor..	Domestic Art	240 00
F. C. Clark, Professor	Economics and Sociology....	400 00
J. E. Hagerty, Assistant Professor....	Economics and Sociology....	220 00
Grace Lenore Pitts, Fellow.....	Economics and Sociology....	60 00
	Total	$1,280 00

University Bulletins Series 7, Number 2

OHIO STATE UNIVERSITY

THIRTY-SECOND ANNUAL REPORT

OF THE

BOARD OF TRUSTEES

TO THE

GOVERNOR OF OHIO

FOR THE

Year Ending June 30, 1902

PART II

The State has no material resources at all comparable with its citizens and no hope of perpetuity except in the intelligence and integrity of its people.

COLUMBUS
PUBLISHED BY THE UNIVERSITY
JUNE, 1902

Entered at the Postoffice at Columbus, Ohio, as Second-Class Matter.

CALENDAR

1902

SEPTEMBER

S	M	T	W	T	F	S
	22	23	24	25	26	27
	29	30				

OCTOBER

S	M	T	W	T	F	S
			1	2	3	4
	6	7	8	9	10	11
	13	14	15	16	17	18
	20	21	22	23	24	25
	27	28	29	30	31	

NOVEMBER

S	M	T	W	T	F	S
						1
	3	4	5	6	7	8
	10	11	12	13	14	15
	17	18	19	20	21	22
	24	25	26			29

DECEMBER

S	M	T	W	T	F	S
	1	2	3	4	5	6
	8	9	10	11	12	13
	15	16	17	18	19	20
	22	23	24			

1903

JANUARY

S	M	T	W	T	F	S
		6	7	8	9	10
	12	13	14	15	16	17
	19	20	21	22	23	24
	26	27	28	29	30	31

FEBRUARY

S	M	T	W	T	F	S
	2	3	4	5	6	7
	9	10	11	12	13	14
	16	17	18	19	20	21
	23	24	25	26	27	28

MARCH

S	M	T	W	T	F	S
	2	3	4	5	6	7
	9	10	11	12	13	14
	16	17	18	19	20	21
	23	24	25	26	27	28
	30	31				

APRIL

S	M	T	W	T	F	S
			1	2	3	
			8	9	10	11
	13	14	15	16	17	18
	20	21	22	23	24	25
	27	28	29	30		

MAY

S	M	T	W	T	F	S
					1	2
	4	5	6	7	8	9
	11	12	13	14	15	16
	18	19	20	21	22	23
	25	26	27	28	29	

JUNE

S	M	T	W	T	F	S
	1	2	3	4	5	6
	8	9	10	11	12	13
	15	16	17	18	19	20
21	22	23	24			

DAYS AND DATES

1902

Summer Session, Lake Laboratory, Sandusky	June 15 to September 15.		
Entrance Examinations (8 A. M.)	Monday,	September	22.
	Tuesday,	September	23.
First Term begins—Registration Day	Tuesday,	September	23.
Lectures and Class-work begin	Wednesday,	September	24.
President's Annual Address (11 A. M.)	Friday,	September	26.
Meeting of Trustees	Wednesday,	September	24.
Latest Date of Admission to candidacy for a degree at the Commencement of June, 1903	Wednesday,	October	1.
Thanksgiving Recess	Thursday,	November	27.
	Friday,	November	28.
First Term ends	Wednesday,	December	24.

Christmas Vacation.

1903

Second Term begins—Registration Day	Tuesday,	January	6.
Second Term ends	Friday,	April	3.

Spring Recess.

Third Term begins—Registration Day	Wednesday,	April	8.
Meeting of Trustees	Wednesday,	April	1.
Field Day—Athletic Association	Saturday,	May	16.
Competitive Drill—Cadet Battalion	Saturday,	May	23.
Memorial Day	Saturday,	May	30.
Latest Date for Presenting Thesis	Friday,	June	12.
Final Examinations	Monday, to	June	15.
	Friday,	June	19.
Latest Date for Filing bound Copy of Thesis	Friday,	June	19.
Baccalaureate Sermon	Sunday,	June	21.
Entrance Examinations (8 A. M.)	Monday,	June	22.
	Tuesday,	June	23.
Class Day	Monday,	June	22.
Meeting of Trustees	Tuesday,	June	23.
Alumni Day	Tuesday,	June	23.
COMMENCEMENT	Wednesday,	June	24.

Summer Vacation.

Summer Session, Lake Laboratory, Sandusky	June 15 to September 15.		
Entrance Examinations (8 A. M.)	Monday,	September	21.
First Term Begins—Registration Day	Tuesday,	September	22.
Lectures and Class-work begin (all Colleges)	Wednesday,	September	23.
Meeting of Trustees	Wednesday,	September	23.
Annual Address by the President (11 A. M.)	Friday,	September	25.

BOARD OF TRUSTEES

1901-1902

		Term Expires.
*LUCIUS B. WING	Newark	May 13, 1902.
THOMAS J. GODFREY	Celina	" 1903.
J. McLAIN SMITH	Dayton	" 1904.
PAUL JONES	Columbus	" 1905.
OSCAR T. CORSON	Columbus	" 1906.
DAVID M. MASSIE	Chillicothe	" 1907.
JOHN T. MACK	Sandusky	" 1908.
MYRON T. HERRICK	Cleveland	" 1909.

OFFICERS OF THE BOARD

OSCAR T. CORSON	President.
PAUL JONES	Vice President.
ALEXIS COPE	Secretary.
LOUIS F. KIESEWETTER	Treasurer.

COMMITTEES OF THE BOARD

EXECUTIVE	FARM	FINANCE
*L. B. WING	J. McLAIN SMITH	D. M. MASSIE
T. J. GODFREY	*L. B. WING	J. McLAIN SMITH
PAUL JONES	JOHN T. MACK	PAUL JONES

FACULTY AND COURSES OF STUDY

THOMAS J. GODFREY OSCAR T. CORSON JOHN T. MACK

*Died February 1st, 1902.

THE UNIVERSITY FACULTY

Members of the University Faculty, and Other Instructors

1901-1902

WILLIAM OXLEY THOMPSON.....University Grounds

President

A. B., Muskingum College, 1878; A. M., ibid., 1881; D. D., ibid., 1891; LL. D., Western University of Pennsylvania, 1897. Licensed by the Presbytery of Zanesville, Dresden, Ohio, April, 1881; Ordained by Presbytery of Fort Dodge, Iowa, July, 1882; Pastor Odebolt, Iowa, 1882-1885; Pastor Longmont, Colorado, 1885-'91; President Longmont College, 1885-89; President Miami University, 1891-'99; present position since 1899.

WILLIAM HENRY SCOTT.....131 Fifteenth avenue

Professor of Philosophy

B. A., Ohio University, 1862; M. A., Ohio University, 1865; LL. D., Ohio University and Ohio Wesleyan, 1884. Superintendent of Public Schools, Athens, Ohio, 1862-'64; Principal of the Preparatory Department of Ohio University, 1864-65; Pastor of Main Street (now Trinity) M. E. Church, Chillicothe, Ohio, 1865-'67; Pastor of Town Street (now First) M. E. Church, Columbus, Ohio, 1867-'69; Professor of Greek, Ohio University, 1869-'72; President and Professor of Philosophy, Ohio University, 1872-'83; President and Professor of Philosophy, Ohio State University, 1883-'95; present position since 1895.

SIDNEY AUGUSTUS NORTON.....368 East Town Street

Emeritus Professor of Chemistry

A. B., Union, 1856; A. M., Union, 1859; M. D., Miami Medical College, 1867; Ph. D., Kenyon, 1878; LL. D., Wooster, 1881. LL. D., Union, 1889. Student at Bonn, Leipsic, Heidelberg; Teacher, Poughkeepsie Collegiate Academy, 1856; Tutor, Union, 1857; Principal Hamilton (Ohio) High School, 1858; Instructor of Natural Science, Cleveland High Schools, 1859-'66; Teacher of Natural Science, Mt. Auburn, 1866-'72; Professor of Chemistry, Miami, 1867-'72; Acting Professor of Physics, Union, 1872-'73; Professor of Chemistry, Ohio State University, 1873-'95; Lecturer in Chemistry, 1895-'99; present position since 1899.

STILLMAN W. ROBINSON.....1353 Highland street

Emeritus Professor of Mechanical Engineering

C. E., University of Michigan, 1863; D. Sc., Ohio State University, 1896; Assistant Engineer U. S. Lake Survey, 1863-'66; Instructor in Engineering, University of Michigan, 1866-'67; Assistant Professor Mining Engineering and Geodesy, University of Michigan, 1867-'70; Professor Mechanical Engineering and Physics, University of Illinois, 1870-'78; Professor Mechanical Engineering and Physics, Ohio State University, 1878-'81; Professor Mechanical Engineering, Ohio State University, 1881-'95. Resigned in 1895. Consulting Mechanical Engineer and Inventor for Wire Grip and McKay Shoe Machinery Companies, 1884-'98; Elected Emeritus Professor of Mechanical Engineering, Ohio State University, 1899. State Inspector of Railroads and Bridges, 1880-'84. Consulting Engineer Santa Fe R. R., 1887-'90. Consulting Engineer Lick Telescope and Mountings, 1887.

NATHANIEL WRIGHT LORD.....338 West Eighth avenue

Professor of Mineralogy and Metallurgy, Director of the School of Mines

E. M., Columbia, 1876; Assistant Engineer, Cincinnati, 1877; Engineer and Metallurgist Monte Grande Gold Mining Co., Nicaragua, 1878; Assistant School of Mines, O. S. U., 1879; Chemist Ohio Geological Survey, 1880-'88; Assistant Professor of Mining and Metallurgy, O. S. U., 1880-'87; Professor Mining and Metallurgy, O. S. U., 1887-'91; Professor Metallurgy and Mineralogy, O. S. U., 1896; Chemist State Board of Agriculture, 1881-'99; Chemist State Board of Health, 1896-'98; present position since 1896.

SAMUEL CARROLL DERBY.....93 Fifteenth avenue

Professor of Latin

A. B., Harvard, 1866; A. M., Harvard, 1869 (in course), 1877 (by examination). Principal of Schools, Ilion, N. Y., 1866-'67; Assistant in Dixwell's Classical School, Boston, 1867-'70; Professor of Latin, Antioch, 1870-'81; President, Antioch, 1877-'81; Student, Latin and History, Harvard, 1876-'77; Student, Latin and History, Johns Hopkins, 1880-'81; Student, Latin, Harvard, 1892-'93; present position since 1881.

WILLIAM RANE LAZENBY.....348 West Eighth avenue

Professor of Horticulture and Forestry

B. Agr., Cornell, 1874; M. Agr., Iowa Agricultural College, 1887. Instructor Horticulture and Botany, Cornell, 1874-'77; Assistant Professor of Horticulture, Cornell, 1877-'81; Lecturer, N. Y. State Grange, 1874-'81; Director Ohio U. S. Experiment Station, 1882-'87; Professor of Botany and Horticulture, Ohio State University, 1881-'92; Collaborator United States Bureau of Forestry, 1901-'02; present position since 1892.

JOSIAH RENICK SMITH.....950 Madison avenue

Professor of the Greek Language and Literature

A. B., Amherst, 1871; A. M., Amherst, 1883; Principal, Mound Street School, Columbus, 1871-'73; Teacher, Columbus High School, 1873-'76; Assistant Professor of Ancient Languages, Ohio State University, 1876-'81; Student at Leipsic, 1881-'83; present position since 1883.

HENRY ADAM WEBER.....1342 Forsythe avenue

Professor of Agricultural Chemistry

Graduate of Polytechnic School, Kaiserslautern, 1866; Student, Chemistry under Von Liebig and Reischauer, and of Mineralogy under Von Kobell, Munich, 1866-'68; Ph. D., Ohio State University, 1879; Ohio Geological Survey, Chemical Department, 1869-'74; Professor of General Chemistry and Mineralogy, University of Illinois, 1874-'82; Chemist to State Board of Agriculture, Illinois, 1874-'82; Chemist to State Board of Health, Illinois, 1874-'82; State Chemist and Chief Chemist to Ohio State Dairy and Food Commissioner, 1885-'97; present position since 1884.

BENJAMIN FRANKLIN THOMAS.....University Grounds

Professor of Physics, and State Sealer of Weights and Measures.

B. Sc., Ripon, 1874; M. Sc. Ripon, 1877; Ph. D., Stevens Institute, 1880. Instructor in Mathematics and Physics, Carleton College, Northfield, Minnesota, 1876-'79; Professor of Physics, University of Missouri, 1880-'85; Member of the Board of Examiners at the International Electrical Exhibition at Philadelphia, 1884; Member of the Jury of Awards, Department of Electricity, at the World's Columbian Exposition, Chicago, 1893; present position since 1885.

GEORGE WELLS KNIGHT.....169 West Eleventh avenue

Professor of American History and Political Science and of Law

A. B., University of Michigan, 1878; A. M., University of Michigan, 1883; Ph. D., University of Michigan, 1884; Student, Law, University of Michigan, 1878-'79; Principal of High School, Lansing, Michigan, 1879-'81; Student, History and Political Science, University of Michigan, 1882-'84; Instructor in History, Ann Arbor High School, 1883-'85; Professor of History and English Literature, Ohio State University, 1885-'87; Professor of History and Political Science, Ohio State University, 1887-'98; Student at Universities of Halle, Berlin, and Frieburg, 1889-'90; present position since 1898.

ROSSER DANIEL BOHANNAN.....Sixteenth and Indianola avenues

Professor of Mathematics

B. Sc., C. E., E. M., University of Virginia, 1876; Student of Mathematics and Physics, Cambridge, England, 1880-'82; Göttingen, 1882-'83; Teacher of Mathematics and Latin, Suffolk Collegiate Institute, Virginia, 1876-'77; Teacher of Mathematics and English, New York Latin School, New York City, 1877-'78; Professor of Mathematics and Natural Science, Emory and Henry College, 1878-'80; Acting Professor of Mathematics, University of Virginia, 1883-'84; Assistant in Mathematics and Physics, University of Virginia, 1884-'87; Professor of Mathematics and Astronomy, Ohio State University, 1887-'95; present position since 1895.

*C. NEWTON BROWN.....1343 Forsythe avenue

Professo of Civil Engineering and Dean of the College of Engineering

C. E., Miami, 1886; Resident Engineer of the Ironton Extension of the Pittsburg, Cincinnati, Chicago & St. Louis R. R., 1881; Ohio Geological Survey, 1882; Assistant in Mathematics and Civil Engineering, Ohio State University, 1883-'85; Associate Professor of Civil Engineering, Ohio State University, 1885-'90; present position since 1890.

ERNST AUGUST EGGERS.....190 West Eleventh avenue, University Grounds

Professor of Germanic Languages and Literatures

Student in Gymnasium at Hanover, at Michigan State Normal School, the Sorbonne, College de France; Instructor in German in the High Schools of Michigan for ten years; Assistant in German, Ohio State University, 1886-'88; Assistant Professor of German, same institution, 1888-'90; present position since 1890.

ALBERT MARTIN BLEILE.....218 King avenue

Professor of Anatomy and Physiology

M. D., Starling Medical College, 1876; Student, Vienna, Chemistry and Physiology, 1876-'77; Student, Physiology, Leipsic, 1877-'78; Student Anatomy and Histology, Paris, 1878-'79; Lecturer on Experimental Physiology, Starling Medical College, 1879; Professor of Physiology, Starling Medical College, 1884; present position since 1891.

WILLIAM ASHBROOK KELLERMAN.....175 Eleventh avenue

Professor of Botany

B. Sc., Cornell, 1874; Ph. D., Zurich, 1881; Professor of Natural Science, Wisconsin State Normal School, 1874-'79; Professor of Botany and Horticulture, Kentucky State College, 1881-'82; Professor of Botany and Zoology, Kansas State Agricultural College, 1883-'87; Professor of Botany, Kansas State Agricultural College, 1888-'91; Botanist, Kansas State Board of Agriculture, 1883-'91; Ohio Geological Survey (Botany) 1892-'93; Founder and Editor of the Journal of Mycology; present position since 1891.

THOMAS FORSYTH HUNT.....188 West Tenth avenue

Professor of Agriculture, and Dean of the College of Agriculture and Domestic Science

B. Sc., University of Illinois, 1884; M. Sc., University of Illinois, 1892; Assistant to Illinois State Entomologist, 1885-'86; Assistant in Agriculture, University of Illinois, 1886-'88; Assistant Agriculturalist, Illinois Experiment Station, 1888-'91; Professor of Agriculture, Pennsylvania State College, 1891-'92; present position since 1892.

GEORGE BEECHER KAUFFMAN.....University Grounds

Professor of Pharmacy, and Dean of the College of Pharmacy

B. Sc., Ohio Wesleyan University, 1877; Pharm. D., Scio, 1894; Associate Professor of Pharmacy, Ohio State University, to 1894; present position since 1894.

BENJAMIN LESTER BOWEN.....775 East Broad street

Professor of Romance Languages and Literatures

A. B., University of Rochester, 1881; Ph. D., Johns Hopkins University, 1888. Post graduate work, University of Rochester, 1881-'82; Professor of Languages, New Windsor College, Maryland, 1882-'83; Graduate Student and Assistant in French, Johns Hopkins University, 1883-'86, and 1887-'88; Student at the Universities of Paris, Bonn, Rome and Madrid, 1885, and 1886-'87; Professor of French and Latin, Bowdoin College, 1888-'89; Acting Associate Professor of French Language and Literature, Ohio State University, 1889-'90; Associate Professor of Romance Languages and Literatures, Ohio State University, 1890-'94; present position since 1894.

JOSEPH VILLIERS DENNEY.....230 West Tenth avenue

Professor of Rhetoric and the English Language, and Dean of the College of Arts, Philosophy and Science

A. B., University of Michigan, 1885. Journalist, 1885-'88; Principal of the Aurora (Illinois) High School, 1888-'90; Instructor in English and Graduate Student, University of Michigan, 1890-'91; Associate Professor of Rhetoric, Ohio State University, 1891-'94; present position since 1894.

*Died March 6th, 1902.

ALLEN CAMPBELL BARROWS.....85 West Tenth avenue

Professor of English Literature.

A. B., Western Reserve, 1861; A. M., Western Reserve, 1866; D. D., Iowa College, 1889. Teacher, Latin and Greek, Phillips Academy, 1865-'66; Professor of Physics, Western Reserve, 1866-'70; Professor of Latin and English Literature, Western Reserve, 1870-'71; Professor of English Literature and History, Iowa Agricultural College, 1887-'94; present position since 1894.

EDWARD ORTON, JR.....The Normandie

Professor and Director of the Department of Clay-Working and Ceramics

E. M., Ohio State University, 1884. Assistant on Ohio Geological Survey, 1882; Chemist for Columbus and Hocking Coal and Iron Company, 1885-'86; Superintendent of Blast Furnace at New Straitsville, O., 1887-'88; Superintendent of Victoria Furnace, Goshen Bridge, Va., 1888; Steel Worker, Homestead Steel Works, Homestead, Pa., 1889; Superintendent Ohio Paving Company's Factory, Columbus, Ohio, 1890-'92; Special Assistant on Clays, Ohio Geological Survey, 1892; Superintendent Acme Vitrified Brick Co., Louisville, Kentucky, 1893; Secretary American Ceramic Society, 1899; State Geologist of Ohio, 1899; present position since May, 1894.

WILLIAM FORREST HUNTER.....1032 Bryden Road; New Hayden Building

Professor of Law and Dean of the College of Law

Admitted to the Bar in 1861; Student, University of Michigan Law School; practicing attorney since 1866; Dean of the Law School, Ohio State University, 1892-'96; present position since 1896.

JAMES HENRY COLLINS.....The Chittenden; New Hayden Building

Professor of Law

In practice for thirty years. Present position since 1891.

EMILIUS OVIATT RANDALL.....1025 Oak street; Supreme Court Building

Professor of Law

Ph. B., Cornell, 1874; LL. B., LL. M., Ohio State University, 1892. Admitted to practice, 1890; Secretary Ohio State Historical Society; Reporter Supreme Court of Ohio. Present position since 1893.

WILLIAM THOMAS MAGRUDER.....191 King avenue

Professor of Mechanical Engineering

M. E., Stevens Institute of Technology, 1881. Practical Experience in Machine Design and Shop Practice, Taunton, Mass., 1881-'96. Student in Chemistry and Mathematics, etc., Johns Hopkins University, 1886-'87; Professor of Mechanical Engineering (practical and theoretical) Vanderbilt University, 1887-'96; present position since July, 1896.

EDGAR BENTON KINKEAD.....Wyandotte avenue; New Hayden Building

Professor of Law

Assistant State Law Librarian, 1887—'94; Special Counsel for Attorney-General of Ohio, 1897-1900. Present position since 1895.

WILLIAM HERBERT PAGE.....1068 Franklin avenue; 27 Board of Trade

Professor of Law

B. A., Yale, 1889; LL. B., Ohio State University, 1892; LL. M., same institution, 1894; Instructor in Central High School, Columbus, Ohio, 1889-'96. Present position since September, 1896.

WILLIAM McPHERSON.....University Campus

Professor of Chemistry

B. Sc., Ohio State University, 1887; M. Sc., Ohio State University, 1890; D. Sc., Ohio State University, 1895; Ph. D., University of Chicago, 1899; Instructor in Chemistry and Physics, Toledo High School, 1887-'89; Instructor in Chemistry and Latin, Toledo High School and Manual Training School, 1889-'92; Assistant in Chemistry, Ohio State University, 1892-'93; Assistant Professor in Chemistry, Ohio State University, 1893-95; Associate Professor, General Chemistry, Ohio State University, 1895-'97; present position since 1897.

JOSEPH NELSON BRADFORD.....54 West Tenth avenue

Professor of Architecture and Drawing.

M. E., Ohio State University, 1883. Draftsman, Ohio Geological Survey, 1882-'83; Motor Power Department Pennsylvania Railroad, 1883-'85; Assistant in Mechanical Engineering and Drawing, Ohio State University, 1885-'90; Assistant Professor of Drawing, Ohio State University, 1890-'93; Associate Professor of Drawing, Ohio State University, 1893-'99; present position since 1899.

DAVID STUART WHITE.....West Fifth avenue

Professor of Veterinary Medicine, and Dean of the College of Veterinary Medicine

D. V. S., Ohio State University, 1890. Student, Royal Veterinary Schools of Hanover, Berlin, 1890-'91; at Imperial Veterinary Institute of Vienna, 1892; Royal Veterinary College of Dresden, 1893; Assistant in Veterinary Medicine, Ohio State University, 1893-'95. Present position since 1895.

HERBERT OSBORN.....485 King avenue

Professor of Zoology and Entomology

B. Sc., Iowa Agricultural College, 1879; M. Sc., same institution, 1880; Student of Entomology at Museum Comparative Zoology (Cambridge, Mass.) 1881-82; College of Physicians and Surgeons, Des Moines, 1884-'85 (Anatomy and Physiology); Zoological Station Naples (Smithsonian table), 1894-'95. Assistant in Zoology and Entomology, Iowa Agricultural College, 1880-'83; Assistant Professor of Zoology and Entomology, Iowa Agricultural College, 1884-'85. Professor of Zoology and Entomology, Iowa Agricultural College, 1886-'98; Special Agent Division of Entomology, U. S. Department of Agriculture, 1885-'94; Entomologist, Iowa Experiment Station, 1890-'98; State Entomologist, Iowa, 1898. Present position since 1898.

CHRISTOPHER P. LINHART.....Gymnasium; The Vendome

Professor of Physical Education and Director of the Gymnasium

M. D., Western Reserve University, Cleveland, 1882. Post-graduate student, same institution 1882-'83; Student and Instructor, Dr. Anderson's Normal School of Physical Education, 1886; student in Harvard Summer School, 1887; House Physician and Surgeon, Cleveland City Hospital, 1883-'85; Assistant Demonstrator of Anatomy, Western Reserve University, 1885-'86, and Assistant Visiting Physician Charity Hospital, Cleveland, 1886; Director of Y. M. C. A. Gymnasium, Orange, N. J., 1886 and 1888; Instructor in Physiology and Physical Education, Newark (N. J.), Academy, 1887 and 1890, and Director of Physical Education, Newark, N. J., Public Schools, 1888-'90; Medical Director Manhattan Athletic Club, 1891 and 1892; Instructor in Physiology and Physical Education, Union College, 1892-'97; Director of the Gymnasium and Instructor in Physical Education, O. S. U., 1897-1900; present position since 1900.

OLIVE B. JONES.....53 Eleventh avenue

Librarian

Assistant Librarian, 1887. Present position since 1893.

HENRY CURWEN LORD.....University Grounds

Professor of Astronomy and Director of the Emerson McMillen Observatory

B. Sc., University of Wisconsin, 1889. Assistant in Washburn Observatory, University of Wisconsin; with Thompson-Houston Electric Company, 1889; Assistant in Mathematics and Astronomy, Ohio State University, 1891-'94; Director and Associate Professor of Astronomy O. S. U., 1895-1900; elected Fellow, Royal Astronomical Society, 1897; present position since 1900.

FRANK EDWIN SANBORN.....303 West Eighth avenue

Professor and Director of the Department of Industrial Arts

S. B., in Mechanical Engineering, Massachusetts Institute of Technology, 1889. Assistant in Drawing, Massachusetts Institute of Technology, 1889-'90; Teacher in Manual High School Department, Pratt Institute, 1890-'91; Walker Special Instructor, Tufts College, 1891-'94; Instructor in Mechanical Department, Tufts College, 1894-'98; Director of the Department of Industrial Arts O. S. U., 1898-1900; present position since September, 1900.

FRANK ARNOLD RAY.....137 King avenue

Professor of Mine Engineering

E. M., Ohio State University, 1887. Superintendent building construction, Elah Terral & Co., 1887-'88; Assistant Mining Engineer C. & H. C. & I. Co., 1888-'89; Chief Engineer C. & H. C. & I. Co., 1889-'92; Chief Engineer Congo Mining Co., 1892-'95; Assistant Professor of Mine Engineering, O. S. U., 1895-'97; Associate Professor, 1897-1900; present position since 1900.

FREDERICK CONVERSE CLARK.....1634 Neil avenue

Professor of Economics and Sociology

A. B., University of Michigan, 1887; A. M., University of Michigan, 1888; Ph. D., University of Michigan, 1891. Student at Halle, Leipzig and Berlin, 1893-'95; Instructor in History and Economics, Ann Arbor High School, 1888-'92; Assistant Professor of Political Science, and Acting Head of the Department, Stanford University, 1892-'93; Assistant Professor of Political Economy, 1893; Assistant Professor of Economics and Sociology, Ohio State University, 1895-'98; Associate Professor, 1898-1900; present position since 1900.

JOHN ALLEN SHAUCK.....95 Winner avenue; Supreme Court Building

Professor of Law

B. A., Otterbein University; LL. B., University of Michigan, 1867; A. M., Otterbein University, 1870; LL. D., Otterbein University, 1897. Judge of the Supreme Court of Ohio; Lecturer on Supreme Court Practice Ohio State University, 1898-1900; present position since 1900.

CAPTAIN GEORGE L. CONVERSE, U. S. A. (Retired)..94 Hoffman avenue; 23 East State st

Professor of Military Science and Tactics

Present position since 1900.

PAUL FISCHER .....250 Marshall avenue

Professor of Pathological Anatomy

B. Sc., Ohio State University, 1891; D. V. M., 1892; Assistant in Veterinary Medicine, O. S. U., 1892-'95; Student in Royal Veterinary Colleges of Hanover, Berlin, and Dresden, three semesters, 1893 and 1894; Professor of Agriculture and Veterinary Science Utah Agricultural College, 1895-1897; Professor of Veterinary Science and Veterinarian Agricultural Experiment Station, Kansas State Agricultural College 1897-1900; State Veterinarian of Kansas and Honary Veterinarian to the Kansas State Board of Agriculture, 1897-1900; Bacteriologist Kansas State Board of Health, 1897-1900; State Veterinarian of Ohio since 1902; present position since 1900.

JOHN WRIGHT DECKER.....825 West Eighth avenue

Professor of Dairying.

B. Agr., University of Wisconsin, 1890. Fellow in Agriculture, University of Wisconsin, 1890-'91. Instructor in Dairying, University of Wisconsin, 1891-99. Associate Professor of Dairying Ohio State University, 1899-1901. Present position since 1901.

EMBURY ASBURY HITCHCOCK.....380 West Eighth avenue

Professor of Experimental Engineering

M. E., Cornell, 1890; Straight Line Engine Company, Syracuse, N. Y., 1889; Corliss Steam Engine Company, Providence, R. I., 1890-'93; Assistant in Mechanical Engineering, Ohio State University, 1893-'95; Assistant Professor of Mechanical Engineering in charge of the Department, 1895-'96; Assistant Professor of Experimental Engineering, Ohio State University, 1896-'97; Associate Professor of Experimental Engineering, Ohio State University, 1897-1901; present position since 1901.

FRANCIS CARY CALDWELL.....401 West Sixth avenue

Professor of Electrical Engineering

A. B., Cornell, 1890; M. E., Cornell, 1891; with Thomson-Houston Electric Co., Lynn, Mass., 1891-'92; Student at the National Polytechnic School, Zurich, 1892-'93; Assistant Professor of Electrical Engineering, Ohio State University, 1893-'97; Associate Professor of Electrical Engineering, 1897-1901; present position since 1901.

CHARLES SMITH PROSSER.....114 West Tenth avenue

Professor of Geology.

B. S., Cornell University, 1883; M. S., Cornell University, 1886; Fellow in Natural History, Cornell, 1884–'85; Instructor in Paleontology, Cornell University, 1885–'88; Assistant Paleontologist, U. S. Geological Survey, 1888–'92; Professor of Natural History, Washburn College, Topeka, Kansas, 1892–'94; Assistant Geologist, U. S. Geological Survey, 1893–'94; Professor of Geology, Union College, Schenectady, N. Y., 1894–'99; Assistant Geologist, N. Y. Geological Survey, 1895–'99; Assistant Geologist, University Geological Survey of Kansas, 1896; Chief of Appalachian Division, Maryland Geological Survey since 1898; Assistant Geologist, Ohio Geological Survey and U. S. Geological Survey, 1900; Associate Professor of Historical Geology, Ohio State University, 1899–1901; present position since 1901.

JOHN ADAMS BOWNOCKER.....1594 Neil avenue

Professor of Inorganic Geology and Curator of the Museum

B. Sc., Ohio State University, 1889; D. Sc., Ohio State University, 1897; Principal of High School, Martins Ferry, 1889–'92; Fellow in Geology, University of Chicago, 1892–'94; Graduate Scholar, Yale University, 1894–'95; Assistant Geological Survey of Ohio, 1892; Assistant Geological Survey of New Jersey, 1893; Assistant Geologist Ohio Survey, 1900—; Assistant in Geology, 1895–'98; Assistant Professor, 1898–'99; Associate Professor of Inorganic Geology and Curator of the Museum, 1899–1901; present position since 1901.

ALFRED DODGE COLE.....

Professor of Physics

A. B., Brown University, 1884; A. M., 1887; Graduate Student, Johns Hopkins University, 1884–85; Harvard University, Summer School, 1887; Student University of Berlin, 1894–'95; Graduate Student, University of Chicago, Summer, 1898; Instructor in Chemistry and Physics, Denison University, 1885–'87; Acting Professor, 1887–'88; Professor of Physics and Chemistry, 1888–1901; Graduate Student and Assistant in Physical Laboratory, University of Chicago, Summers of 1899 and 1900; present position since September, 1901.

*JAMES M. BUTLER.....Board of Trade

Professor of Law

MINNIE AVA NELLIE STONER.....

Professor of Domestic Science and Head of Department of Domestic Economy.

B. Sc., South Dakota College, 1890; Assistant in South Dakota State Normal, Madison S. D., 1890–92; Student in Boston Normal School of Household Arts, 1892–'93; graduated in class '93 with Normal Diploma in Domestic Science and Art; Investigation at Harvard, 1893; Superintendent Y. W. C. A., Industrial School, Lincoln, Neb., 1894; Demontration Lecture work at Fort Smith, Ark., 1895, in Mr. Aubrey's School; Professor of Domestic Arts University of Tennessee, Knoxville, 1896–1898; Dean of the Woman's Department and Professor of Domestic Science, Kansas State Agricultural College, 1898–'01; present position since 1901.

WILBUR HENRY SIEBERT.....1332 Highland street

Associate Professor of European History, and Secretary of the University Faculty

A. B., Ohio State University, 1888; A. B. (with honorable mention) Harvard University, 1889; M. A., Harvard, 1890; Student, Freiburg and Berlin, 1890–'91; Student, Harvard, 1895; Assistant in History and Political Science, Ohio State University, 1891–'93; Assistant Professor of History, Ohio State University, 1893–'95, 1897–'98; Student, Harvard University, 1895–'97; present position since 1898.

GEORGE WASHINGTON McCOARD.....46 West Fourth avenue

Associate Professor of Mathematics

B. A., Bethany, West Virginia, 1873; M. A., Bethany, 1882; Principal of Oakdale Classical Normal Institute, Allegheny County, Pennsylvania, 1873–'74; Private Tutor in Cleveland, Ohio, 1874–'80; Principal of Public Schools, Irving Park, Chicago, 1880–'81; Teacher of Latin and Mathematics, Columbus High School, 1881–'82; Assistant in Mathematics and Latin, Ohio State University, 1882–'87. Assistant Professor of Mathematics, Ohio State University, 1887–'99; present position since 1899.

* Resigned February 7, 1902.

CHARLES WALTER MESLOH.....University Grounds

Associate Professor of Germanic Languages and Literatures

A. B., Ohio State University, 1889; M. A., Ohio State University, 1895; student in the University of Chicago, 1894; Student, University of Berlin, 1896-'97; Assistant in German, Ohio State University, 1889-'95; present position since 1895.

ARTHUR WINFRED HODGMAN.....164 West Ninth avenue

Associate Professor of the Classic Languages

A. B., Harvard, 1890; A. M., Harvard, 1893; Ph. D. (Classical Philology) Harvard, 1896; Student in Graduate School, Harvard, Classical Philology, 1892-'96; Instructor in Preparatory Schools, Quincy, Duxbury, Mass., 1890-'92; Assistant in Greek and Latin, Ohio State University, 1896-'97; Assistant Professor of the Classic Languages, Ohio State University, 1897-'99; present position since September, 1899.

CORNELIA PORTER SOUTHER.....

Associate Professor of Domestic Art

Graduate of Mary Institute (Washington University), St. Louis, Mo., 1883; Certificated Student at Mary Institute, 1883-'85; Handarbeitslehrerinnen-Seminar des Carola-Vereins, Leipzig, 1896-'97; Investigations in Domestic Art Methods in foreign cities, 1896-'98; Teacher of Sewing, Mrs. Ball's Private School, St. Louis, 1898; Special Student at Pratt Institute, Brooklyn, and Teachers' College, Columbia University, New York, 1899; Assistant Professor of Domestic Art, Ohio State University, 1899-1900; present position since 1900.

CLARA MAUD BERRYMAN.....485 East Town Street

Associate Professor of Physical Education

Graduated from Wisconsin Academy, 1893; University of Wisconsin, 1893-'95; Abroad 1896; graduated from D. Sargent's Normal School, Honors in Theory, 1900; present position since 1900.

WILLIAM EDWARDS HENDERSON.....

Associate Professor of Chemistry.

A. B., University of Wooster, 1891; M. A., 1894; Ph. D., Johns Hopkins University, 1897. Graduate Student Johns Hopkins University, 1893-'97. Fellow in Chemistry, Johns Hopkins University, 1896-'97. Professor of Natural Sciences, College of Emporia, Kansas, 1891-'93. Professor of Chemistry, Ohio University, 1897-'99. Present position since 1901.

CHRISTOPHER ELIAS SHERMAN.....772 Oak street

Associate Professor of Civil Engineering.

C. E., Ohio State University, 1894. Engaged in Civil Engineering in Ohio, Tennessee, Virginia, North Carolina and Arizona for three years during college course. Engaged in railroad, geological and governmental engineering from graduation until September, 1896. Engineer to Park Commission, Springfield, Ohio, and U. S. Assistant Engineer at Tampa, Florida, and Huntsville, Alabama, summer of 1898; U. S. Assistant Engineer on Roads and Bridges, Yellowstone National Park, summer of 1899 and 1900; Assistant in Civil Engineering, Ohio State University, 1896-'97; Assistant Professor of Civil Engineering, Ohio State University, 1897-1901; present position since 1901.

JOSEPH RUSSELL TAYLOR.....222 King avenue

Associate Professor of English Literature.

B. A., Ohio State University, 1887; M. A., Columbia University, 1897; Assistant in Drawing, Ohio State University, 1889-'94; Assistant in Rhetoric, Ohio State University, 1894-'97; University Fellow in Literature, Columbia University, 1896-'97; Assistant Professor of Rhetoric, Ohio State University, 1897-'99; Assistant Professor of English Literature, Ohio State University, 1899-1901; present position since 1901.

JAMES ELLSWORTH BOYD.....60 West Maynard avenue

Associate Professor of Mathematics

B. Sc., Ohio State University, 1891; M. Sc., Cornell, 1896. Student in Physics and Mathematics, Ohio State University, 1893-'95; Student in Experimental and Theoretical Physics, Cornell, 1895-'96; also Student in Sibley College of Mechanic Arts, Cornell, summer of 1895; Assistant in Physics, Ohio State University, 1891-'95; held scholarship in Physics, Cornell, 1895; Assistant Professor of Physics, Ohio State University, 1896-1901; present position since September, 1901.

CHARLES A. BRUCE.....235 West Tenth avenue

Associate Professor of the Romance Languages

A. B., Ohio State University, 1895; Student of French, Amherst, Summer School, 1895; Graduate Student, University of Chicago, Summer Quarter, 1896; Student, University of Geneva, Summer School, 1898; Student at the Sorbonne, College de France, and Ecole des Hautes-Etudes, Paris, 1898-'99; Graduate Student, University of Chicago, Summer Quarter, 1900; Assistant in French, Ohio State University, 1895-'99; Assistant Professor of Romance Languages, Ohio State University, 1899-1901; present position since 1901.

SEPTIMUS SISSON.....

Associate Professor of Veterinary Medicine

S. B., University of Chicago, 1898; Ontario Veterinary College, 1891; Demonstrator of Anatomy, Ontario Veterinary College, 1891-'99; Graduate Student, University of Chicago, summer quarters of 1900-'01; Associate Professor of Veterinary Science and Zoology, Kansas State Agricultural College, 1899; Professor of Zoology, ibid., 1900; present position since 1901.

THOMAS EWING FRENCH.....1458 Worthington street

Associate Professor of Architecture and Drawing

M. E., Ohio State University, 1895; Assistant in Drawing Department three years preceding graduation; Draftsman, The Smith-Vaile Company, Dayton, 1888-'90; Instructor in Mechanical Drawing, Y. M. C. A., Dayton, 1888-'91; Chief Draftsman, The Smith-Vaile Company, Dayton, 1891; Assistant in Drawing, 1892-'98; Assistant Professor of Drawing, 1898-1901; present position since 1901.

DAVID R. MAJOR.....307 West Sixth avenue

Associate Professor of Education.

S. B., Wabash College, 1890; Ph. D., Cornell University, 1896; Higher Diploma in Education, Teachers' College, Columbia University, 1899; Principal of Schools, Warren, Indiana, 1890-'92; Graduate Student in Philosophy and Sociology, Cornell University, 1892-'96; Scholar in Philosophy, 1894-'95; Fellow, 1895-'96; Principal of High School, Frankfort, Indiana, 1896-'98; Fellow in Education, Teachers' College, Columbia University, 1898-'99; Graduate Student, University of Chicago, Summer Quarter, 1899; Acting Professor of Pedagogy, University of Nebraska, 1899-'00; Assistant in Education, Teachers' College, Columbia University, 1900-'01; Associate Professor of Education, Ohio State University, 1901.

J. WARREN SMITH.....1422 Oak street

Lecturer on Meteorology

B. S., New Hampshire College of Agriculture and Mechanic Arts, 1888; M. S., N. H. C. of A. & M. A., 1899; special course in Meteorology at Harvard University in 1890 and 1891; employed in United States Weather Bureau since 1888; present position Section Director in charge Columbus Station and the Ohio Section of the Climate and Crop Division of the Bureau.

WILLIAM LUCIUS GRAVES.....1313 Forsythe avenue

Assistant Professor of Rhetoric

B. A., Ohio State University, 1893; M. A., Ohio State University, 1897. Instructor in High School, Coshocton, 1894-'95; Fellow and Assistant in Rhetoric and English Language, Ohio State University, 1895-'96; present position since 1896.

CLAIR ALBERT DYE.....169 King avenue

Assistant Professor of Pharmacy

G. Ph., Ohio State University, 1891. Post-graduate student in Chemistry and Pharmacy, Ohio State University; Ph. D., University of Bern, 1901; Assistant in Chemistry and Pharmacy, 1890-'94; Assistant in Pharmacy, 1894-'98. Present position since 1898.

CHARLES WILLIAM FOULK.....1656 Neil avenue

Assistant Professor of Chemistry

B. A., Ohio State University, 1894; Commercial Analytical Work, 1894-'96; Assistant in General Chemistry, 1896-'98; Student at Leipsic, 1899-1901; present position since 1898.

CHARLES LINCOLN ARNOLD.....328 West Eighth avenue

Assistant Professor of Mathematics

B. Sc., Ohio State University, 1890; M. Sc., Ohio State University, 1894. Post-graduate Student, University of Chicago and Ohio State University, 1894-'95. Assistant in Mathematics Ohio State University, 1890-'99. Present position since 1899.

JOHN H. SCHAFFNER.....40 West Tenth avenue

Assistant Professor of Botany

A. B., Baker University, Kansas, 1893. A. M., University of Michigan, 1894; M. S., Baker University, 1896. Student in Botany, Zoology and Geology, University of Michigan, 1893-'95. Student in Botany and Paleo-Botany, University of Chicago, 1896-'97. Assistant in Botany, University of Michigan, 1894-'95. Professor of Natural Sciences, South Dakota University, 1895-'96; Assistant in Botany, Ohio State University, 1897-'99. Present position since 1899.

CHARLES BRADFIELD MORREY.....86 King avenue

Assistant Professor of Anatomy and Physiology

B. A., Ohio State University, 1890; Post-graduate Student, Ohio State University, 1890-'91; M. D., Starling Medical College, 1896. Assistant in Latin, Ohio State University, 1890-91; Assistant in Latin and Physiology, 1891-92; Assistant in Physiology, Ohio State University, 1892-'95; Student in Vienna and Paris, 1897-'99. Present position since 1899.

JAMES STEWART HINE.....1340 Hunter avenue

Assistant Professor of Zoology and Entomology

B. Sc. (H. and F.), Ohio State University, 1893. Superintendent of the N. W. Substation of the Ohio Agricultural Experiment Station, 1893. Assistant in Horticulture, Ohio State University, 1894. Student in Entomology, Cornell, 1895. Assistant in the Division of Entomology of the United State Department of Agriculture, summers of 1897 and 1899; Assistant in Entomology, 1895-'99; present position since 1899.

KARL DALE SWARTZEL.....57 East Eighth avenue

Assistant Professor of Mathematics

B. Sc., Ohio State University, 1893; M. Sc., Ohio State University, 1894. Fellow and Assistant in Mathematics, Ohio State University, 1894-'95. Assistant in Mathematics, Ohio State University, 1895-'99. Present position since 1899.

GEORGE H. McKNIGHT.....312 West Seventh avenue

Assistant Professor of Rhetoric and English Language

A. B., Cornell, 1892, Ph. D., Cornell, 1896. Instructor in English at Cornell, 1892-'97; Cornell Traveling Fellow in English Philology, 1897-'98; Student in Freiburg, 1897-'98. Student in Paris and London, 1898-'99. Present position since 1899.

HERRICK CLEVELAND ALLEN.....275 East Gay street

Assistant Professor of Public Speaking

Student Union College 1894-'95-'96. LL. B. Cornell University, 1898. Instructor Department of Oratory and Debate, Cornell University, 1898,'99. Present position since 1899.

FRANCIS LEROY LANDACRE.....1378 Neil avenue

Assistant Professor in Zoology and Entomology

B. A., Ohio State University, 1895. Student in Chicago University, summer quarters of 1898 and of 1899; Professor of Embryology in Ohio Medical University since 1896; Assistant in Zoology and Entomology, Ohio State University, 1895-1900; present position since 1900.

WALLACE S. ELDEN.....1462 Neil avenue

Assistant Professor of Classic Languages

A. B., Bowdoin, 1889; A. M., Bowdoin, 1892; Ph. D., University of Michigan, 1900; Student in Johns Hopkins University, 1889-'90; Headmaster, Rectory School, Hamden, Conn., 1890-91; Student in Johns Hopkins University, 1891-'92; Instructor in Latin and French, Ohio State University, 1892-'94; Instructor in the Romance Languages, University of Michigan, 1894-'96. Instructor in Latin and Greek, University of Maine, 1896-'97; Assistant Professor of the Classic Languages, University of Maine, 1897-'99; Student in the University of Michigan, 1899-1900; Assistant Professor of the Classic Languages, Ohio State University, 1900; present position since September, 1900.

FRED A. FISH.....

Assistant Professor of Electrical Engineering

M. E. in E. E., Ohio State University, 1898; Fellow in Electrical Engineering, Ohio State University, 1898–'99; Assistant, 1899-1900; Honorary Fellow in Electrical Engineering, University of Wisconson, 1900–'01; present position since 1901.

WILLIAM ABNER KNIGHT.....206 West Lane avenue

Assistant Professor of Machine Shop Practice

M. E., Ohio State University, 1900; thirteen years' practical experience in workshops; Assistant in the Industrial Department and Foreman of the Machine Shops, 1893–'98; Assistant in Industrial Arts and Instructor in Machine Work, 1898-1900; Instructor in Machine Work, 1900–'01; present position since July, 1901.

HARRY WALDO KUHN.....234 West Tenth avenue

Assistant Professor of Mathematics

B. Sc., Ohio State University, 1897; Ph. D., Cornell University, 1901; Fellow and Assistant in Mathematics, Ohio State University, 1897–'98; Oliver Scholar in Mathematics at Cornell, 1898–'99; Erastus Brooks Fellow in Mathematics, 1899-1900; and Assistant in Mathematics, 1900–'01; present position since 1901.

JAMES E. HAGERTY.....212 Tenth avenue

Assistant Professor of Economics and Sociology

A. B., Indiana University, 1892; Ph. D., University of Pennsylvania, 1900; Instructor in Mathematics La Porte High School, 1892–'96; Graduate Student University of Chicago, 1896–'97; Honorary Fellow in Economics University of Wisconsin, 1897–'98; Student at Berlin and Halle, 1898–'99; Harrison Fellow in Sociology University of Pennsylvania, 1899–'00; Senior Fellow in Sociology, University of Pennsylvania, 1900–'01; present position since 1901.

THEODORE C. SMITH.....169 West Eleventh avenue

Assistant Professor of American History and Political Science

A. B., Harvard, 1892; A. M., Harvard, 1893; Ph. D., 1896; Graduate Student, Harvard, 1892–'94, 1895–'96; Fellow in American History, University of Wisconsin, 1894–'95; Ozias Goodwin Memorial Fellow, Harvard, 1896–'97; Student at Universities of Geneva, Paris and Berlin, 1896–'97; Instructor in History, University of Michigan, 1897–'98; Instructor in History, Vassar College, 1898-1900; present position since 1901

J. D. BATCHELDER.....Hotel Vendome

Assistant Professor of Romance Languages

A. B., University of Vermont, 1894; Instructor Greek and French, Shattuck Military Academy, 1894–'95; LL. B., Minnesota, 1896; Postgraduate Work, 1896–'97–'98; University of Berlin; University of Oxford, University of Madrid; University of Sorbonne, University of Rome; Fellow by Courtesy Johns Hopkins, 1898–'99; Summer Semester, Harvard, 1899; Fellow by Courtesy Johns Hopkins, 1899-1900; Instructor Romances, University of Iowa, 1900–'01; Asistant Professor Romances, University of Iowa, 1900–'01; present position since 1901.

FREDERICK EDWARD KESTER.....1473 Neil avenue

Assistant Professor of Physics

M. E. (in E. E.), Ohio State University, 1895. M. A., Cornell, 1899. Fellow and Assistant in Physics, Ohio State University, 1895–'97. Assistant in Physics, Ohio State University, 1897–'98, held scholarship in Physics, Cornell, 1898. Instructor in Physics, Ohio State University, 1899–'01. Present position since 1901.

THOMAS HARVEY HAINES.....368 King avenue

Assistant Professor of Philosophy

B. A., Haverford College, Haverford, Pa., 1896; M. A., Haverford College, 1897; M. A., Harvard University, 1898; Ph. D., Harvard University, 1901; Assistant in Philosophy, Harvard University, 1898–'99; present position since 1901

BURT BIDWELL HERRICK.....167 Tenth avenue

Instructor in Cheese Making

Present position since 1898.

WILLIAM HENRY RENCK.....910 West Rich street

Instructor in Pattern Making and Founding

Assistant in Industrial Arts and Foreman of the Carpenter and Pattern Shops, O. S. U., 1889; present position since 1900.

CHARLES PHILIP CROWE.....971 Highland street

Instructor in Forging

Student, Ohio Business College, Delaware, Ohio; Lebanon Normal School, Lebanon, Ohio; Teacher in Public Schools of Delaware and Union Counties, two years; Forge shop experience, seven years; Manufacturer of Steel Forgings and Springs, six years; Assistant in Industrial Arts and Forge Master, O. S. U., 1899; present position since 1900.

ALONZO HUBERT TUTTLE.....215 West Tenth avenue

Instructor in American History.

A. B., University of Michigan, 1896; Assistant Principal of High School, Ishpeming, Mich., 1896-'98; Principal of High School, Ironwood, Mich., 1898-1900; present position since 1900.

ARTHUR ERNEST DAVIES.....420 Fifteenth avenue

Instructor in Philosophy

Student in Owen's College, Manchester, England, and University College, London, 1884-'88; B. D., Yale Divinity School, 1891; Ph. D., Yale University, 1898; present position since 1900.

ALBERT EARL VINSON.....134 West Ninth avenue

Instructor in Agricultural Chemistry.

B. Sc., Ohio State University, 1901; Instructor in Chemistry, Y. M. C. A., Dayton, Ohio, 1895; Assistant in Agricultural Chemistry, Ohio State University, 1896-1901; present position since 1901.

THOMAS KENYON LEWIS.....1337 Summit street

Instructor in Drawing

B. Sc., Ohio State University, 1894. Graduate Student, Ohio State University, 1894-'95. Summer of 1897 and summer of 1898 at Cincinnati Art Academy. Assistant in Drawing, 1894-'01. Present position since 1901.

SILAS MARTIN.....317 Fifteenth avenue

Instructor in Drawing.

Studied Art with J. H. Witt, E. F. Andrews and Homier. Private Teacher in Art for twenty years. Assistant in Drawing, 1899-'01. Present position since 1901.

JOSEPH HENRY VOSSKUEHLER.....54 West Tenth avenue

Instructor in Drawing.

M. E., Ohio State University, 1900; Assistant in Drawing Department two years preceding graduation; Draftsman Stilwell-Bierce-Smith-Vaile Co., Dayton, Ohio, 1891-'06; Head of the Department of Drawing and Instructor in Mathematics, Miller Manual Labor School, Virginia, 1900-'01; present position since 1901.

A. V. BLEININGER.....

Instructor in Ceramics

B. Lc. (Chemistry), 1901; Akron Paving Brick Co., 1890-'92; Cleveland Vitrified Pressed Brick Co, 1892-1895; Correspondent of "The Clay Worker," in Germany, 1895; Laboratory Assistant in Ceramics, 1898-'99; Ohio Mining and Manufacturing Co., Shawnee, Ohio, summers 1898 and 1899; Editor American Ceramics Society's Translation of Seger's Gesammelte Schriften, 1900-'02; Assistant on Ohio Geological Survey, 1900 and 1901; present position since 1901.

BERTHOLD AUGUST EISENLOHR.....388 West Eighth avenue

Instructor in Germanic Languages.

B. Ph., Ohio State University, 1898; present position since 1901.

S. E. RASOR.....

Assistant in Mathematics

B. Sc., Ohio State University, 1898; A. M., Ohio State University, 1902; Fellow in Mathematics, O. S. U., 1898-'99; Professor of Mathematics, Amity College, Iowa, 1899-'00; present position since 1901.

EDWARD EVERETT SOMMERMEIR.....1590 Neil avenue

Instructor in Metallurgy and Mineralogy

G Ph., Ohio State University, 1898. Student Laboratory Assistant in Chemistry, 1897-'98. Assistant in Metallurgy and Mineralogy, 1898-'01. Present position since 1901.

DON CARLOS HUDDLESON.....North High street

Instructor in Physical Education

G. Ph., Ohio State University, 1897. Medical Student, 1897. Summer School of Physical Training Chautauqua, 1898. Assistant in Gymnasium, 1898-'01. Present position since 1900.

MERRITT FINLEY MILLER.....252 West Eighth avenue

Instructor in Agronomy.

B. Sc., Ohio State University, 1900; M. S. A., Cornell University, 1901; Assistant in Bureau of Soils, United States Department of Agriculture, July 1, 1901 to January 1, 1902; present position since January 1, 1902.

FRANK RUHLEN.....University Grounds

Instructor in Zootechny

B. Sc., Ohio State University, 1896; Assistant in Agriculture, Ohio State University, 1896-1902; present position since 1902.

HARRIET TOWNSHEND.....53 West Eleventh avenue

Assistant in Library

Present position since September, 1895.

MAUD DOROTHY JEFFREY.....128 West Tenth avenue

Assistant in Library

B. Ph., Ohio State University, 1895. Student of Library Science, Ohio State University, 1895-'96. Student of Library Science, Amherst, summer of 1897. Present position since September, 1896.

GERTRUDE STOWELL KELLICOTT.....1332 Highland street

Assistant in Library

Student, Ohio State University, 1888-'95. Student of Library Science, Ohio State University, 1895-'96. Student of Library Science, Amherst, summer of 1897. Present position since September, 1896.

CLAUDE B. GUITTARD.....80 McMillen avenue

Assistant in Library

Student in Ohio State University, 1892-'96, Assistant in Ohio State Library, 1897-'98. Student in Library Science, Washington, D. C., summer of 1899. Present position since November, 1898.

OLIVER V. BRUMLEY.....University Grounds

Assistant in Veterinary Medicine.

Veterinary Surgeon's Certificate, Ohio State University, 1897. Practiced 1897-'98. Present position since 1898.

DELBERT ALONZO CROWNER.....West Jefferson, Ohio

Assistant in Butter Making

B. Sc., Ohio State University, 1896; present position since 1899.

MELVIN DRESBACH.....236 West Eighth avenue

Assistant in Anatomy and Physiology

B. Sc., Ohio State University; M. Sc., Ohio State University, 1899.

FRED. J. TYLER.....O. S. U. Grounds

Assistant in Botany

B. Sc. (H. and F.), Ohio State University, 1900; M. A., Ohio State University, 1902; present position since 1900.

WILLIAM L. DAVIES.....

Assistant in Civil Engineering

VERNON H. DAVIS.....University Grounds

Assistant in Horticulture and Forestry

B. Sc. (Agr.), Ohio State University, 1900; M. S. A., Cornell University, 1901; present position since April, 1901.

F. A. BOHN.....71 West Eleventh avenue

Assistant Reference Librarian

B. Ph., Ohio State University, 1900; M. A., Ohio State University, 1901; Student Assistant Ohio State University Library, 1900-'01; Student Wisconsin Summer Library School, 1901; present position since 1901.

GEORGE W. FROST.....241 Buttles avenue

Assistant in Mechanical Engineering

M. E., Ohio State University, 1900; Fellow in Mechanical Engineering, Ohio State University, 1900-'01; present position since 1901.

SARAH BARROWS.....85 West Tenth avenue

Assistant in German

RUDOLPH HIRSCH, B. Sc.....1060 South Front street

Assistant in Agricultural Chemistry.

B. Sc., Ohio State University, 1901.

WILLIAM C. MILLS.....19 West Tenth avenue

Curator of Archæology

B. Sc. (H. and F.), Ohio State University, 1898; M. Sc., O. S. U., 1902; Curator and Librarian of the Ohio State Archaeological and Historical Society; Museum and Library, Orton Hall, O. S. U.; Librarian Ohio Academy of Science, Library, Orton Hall, O. S. U.

C. P. LINVILLE.....

Fellow in Chemistry

B. Sc. (in Chemistry), Ohio State University, 1900.

W. L. DUBOIS.....61 West Eighth avenue

Fellow in Chemistry

B. Sc., Ohio State University, 1900.

J. F. TRAVIS.....1018 Neil avenue

Fellow in Mathematics

B. A., Ohio State University, 1900.

JOHN C. BRIDWELL.....

Fellow in Botany

ELMA B. PERRY.....

Fellow in Botany

GRACE LENORE PITTS.....309 East Gay street

Fellow in Economics.

B. Ph., Ohio State University, 1900; Fellow in Economics, 1899-'00; A. M., Ohio State University, 1901.

*ROGER DENISON DEWOLF.....

Fellow in Electrical Engineering

*CHARLES B. SAYRE.....

Fellow in Library

MELVILLE T. COOK.....4 West Seventh avenue

Fellow in Zoology and Entomology

A. B., Leland Stanford University, 1894; A. M., DePauw University, 1901; Instructor in Biology in DePauw University, 1895-'97; Professor of Biology in DePauw University since 1897.

HARRY THOMAS HANCE.....

Fellow in Chemistry

B. Sc. (in Chemistry), Ohio State University, 1901.

*DANFORTH E. BALL.....

Fellow in Astronomy.

FRANK COWEN McKINNEY.....185 West Ninth avenue

Fellow in Rhetoric and English Language

B. A., Ohio State University, 1901; M. A., 1902.

CLARA CONVERSE EWALT.....70 Buttles avenue

Fellow in Rhetoric and English Language

B. Ph., Ohio State University, 1901.

ANNA ERNESTINE WILLIAMS.....35 King avenue

Fellow in Rhetoric and English Language

B. Ph., Ohio State University, 1899.

C. G. CONLEY.....

Fellow in Astronomy

*J. R. CHAMBERLIN.....103 West Ninth avenue

Fellow in Architecture and Drawing

CLIFFORD STEELE VAN DYKE.....202 West Eighth avenue

Fellow in Industrial Arts

CARL CONRAD ECKHARDT .....71 West Eleventh avenue

Fellow in Library

OTTO E. JENNINGS.....Botanical Hall, O. S. U. Grounds

Florist

* Resigned.

CHANGES, 1902-1903

WITHDRAWN

Professor Roger B. Johnson, Professor David F. Pugh, Professor William D. Gibbs, Professor James M. Butler, Assistant Professor Walter A. Landacre, Assistant H. C. Gore, Assistant S. S. Edmands, Fellow C. B. Sayre, Fellow D. E. Ball, Fellow R. D. DeWolf, Fellow J. R. Chamberlin, Fellow Walter Fischer, Fellow J. C. Bridwell, Fellow Elma B. Perry, Fellow Frank C. McKinney, Fellow Harriet G. Burr.

APPOINTMENTS

CHARLES S. PLUMB, B. Sc.....
Professor of Animal Husbandry

ALBERT HENRY HELLER, C. E.....
Professor of Civil Engineering

FRANK HARVEY ENO, B. Sc., C. E.....
Associate Professor of Civil Engineering

HORACE JUDD.....
Assistant Professor of Experimental Engineering

ROBERT E. RIGHTMIRE.....
Instructor in American History and Political Science

MARION WILSON MUMMA.....
Assistant in Chemistry

SARAH BARROWS.....
Assistant in Germanic Languages and Literature

JAMES GLOSSBRENNER SANDERS.....
Fellow in Botany

HARRIET GRISWOLD BURR.....
Fellow in Botany

LLOYD YOST.....
Fellow in Mechanical Engineering

ERWIN G. BAILEY.....
Fellow in Experimental Engineering

CATHARINE EMILY ANDREWS.....
Fellow in Chemistry

EDWARD NATHAN WEBB.....
Fellow in Chemistry

GILBERT PENNOCK.....
Fellow in Rhetoric and English Language

OTTO H. SWEZEY.....
Fellow in Zoology and Entomology

CHANGES IN TITLES

1902-1903

FRANK RUHLEN,	Assistant in Agriculture Instructor in Zootechny
A. H. TUTTLE,	Instructor in American History and Political Science Assistant Professor of American History and Political Science
CHAS. B. MORREY,	Assistant Professor of Anatomy and Physiology Associate Professor of Anatomy and Physiology
MELVIN DRESBACH,	Assistant in Anatomy and Physiology Instructor in Anatomy and Physiology
T. E. FRENCH,	Assistant Professor of Architecture and Drawing Associate Professor of Architecture and Drawing
J. H. SCHAFFNER,	Assistant Professor of Botany Associate Professor of Botany
CHAS. W. FOULK,	Assistant Professor of Chemistry Associate Professor of Chemistry
C. E. SHERMAN,	Associate Professor of Civil Engineering Professor of Civil Engineering
W. H. SIEBERT,	Associate Professor of European History Professor of European History
W. S. ELDEN,	Assistant Professor of Classical Languages Associate Professor og Classical Languages
VERNON H. DAVIS,	Assistant in Horticulture and Forestry Assistant Professor of Horticulture and Forestry
CLARA M. BERRYMAN,	Associate Professor of Physical Education Director of Physical Education for Women
O. V. BRUMLEY,	Assistant in Veterinary Medicine Assistant Professor of Veterinary Medicine
J. S. HINE,	Assistant Professor of Zoology and Entomology Associate Professor of Zoology and Entomology
F. L. LANDACRE,	Assistant Professor of Zoology and Entomology Associate Professor of Zoology and Entomology

EXECUTIVE DEPARTMENT

1901-1902

WILLIAM OXLEY THOMPSON.....President
ALEXIS COPE.....Secretary Board of Trustees and Bursar
W. C. McCRACKEN.....Chief Engineer
KATHARINE H. DUNCAN.....Executive Clerk
EDITH D. COCKINS.....Registrar
HELEN R. POWELL.....Assistant to the Registrar
CARL E. STEEB.....Accountant
EDITH R. HUBLER.....Secretary's Clerk and Stenographer
ERNEST E. HARROLD.....Dispenser in Chemical Store Room
ROY W. FUNK.....Assistant in Chemical Store Room

UNVERSITY EMPLOYES

WILLIAM STANLEY.....Assistant Engineer
WILLIAM CASE.....Second Assistant Engineer
THOMAS BOUDE.....First Fireman
FRED BREWER.....Second Fireman
B. A. LEBAY.....Steam Fitter
MARION PECK.....Helper Boiler House
J. MITCHELL.....Second Helper Boiler House
GEORGE ROSE.....Plumber
EARL KIMMEL.....Helper
C. H. WOODRUFF.....Carpenter
J. P. COVAN.....Machinist and Electrician
A. F. HALL.....Machinist
T. E. OSBURN.....Watchman
JOHN RICKETTS.....Watchman
JAMES KELLEY.....Lawn Keeper
WILLIAM C. WEIR.....Elevator Operator

JANITORS

CHARLES HICKS.....University Hall
G. A. GOODSPEED.....Chemical Building
JOHN H. BROWN.....Hayes Hall
W. R. THOMAS.....Armory and Gymnasium
WILLIAM WHITESTINE.....Biological Hall
HARRY CHANTLER.....Orton Hall
G. C. DENNY.....Horticultural and Botanical Buildings
M. N. COOK.....Townshend Hall
H. M. TEMPLIN.....Veterinary Hospital

HELPERS

EARL CONWAY.....University Hall
W. C. CONKLIN.....Chemical and Orton Halls
FRED FLEISCHER.....Armory and Gymnasium
JOSEPH K. PRITNER.....Townshend Hall
WASHINGTON TOWNSEL.....Orton Hall

STUDENT JANITORS

R. M. MARTIN.....Observatory
HENRY H. HAMILTON.....Botanical Hall
R. E. McINTOSH.....Electrical Laboratory
E. G. BAILEY.....Mechanical Laboratory

Standing Committees of the General Faculty

Committee on Amusements and Receptions:
PROFESSOR KNIGHT, *Chairman*,
PROFESSOR J. R. SMITH,
PROFESSOR DENNEY,
PRESIDENT THOMPSON.

Appointment Committee:
PRESIDENT THOMPSON, *Chairman*,
PROFESSOR KNIGHT,
PROFESSOR DERBY,
PROFESSOR MCPHERSON,
PROFESSOR MAJOR,
PROFESSOR THOMAS,
PROFESSOR KELLERMAN.

Athletic Board:
PROFESSOR KAUFFMAN (for three years),
PROFESSOR THOMAS (for two years),
PROFESSOR BLEILE (for one year).

Committee on Catalogue and Time Schedule:
PRESIDENT THOMPSON, *Chairman*,
PROFESSOR SIEBERT,
PROFESSOR BOHANNAN.

Committee on Commencement:
PROFESSOR RAY, *Chairman*,
PROFESSOR BOWNOCKER,
PROFESSOR PAGE,
PRESIDENT THOMPSON.

Debate and Oratory Council:
ASSISTANT PROFESSOR ALLEN,
PROFESSOR DENNEY,
PROFESSOR KNIGHT,
PROFESSOR CLARK,
PROFESSOR SCOTT,
PROFESSOR HUNTER.

Committee on Diplomas:
PROFESSOR BRADFORD.

High School Committee:
PRESIDENT THOMPSON, *Chairman*,
PROFESSOR N. W. LORD,
PROFESSOR HUNT,
PROFESSOR BOWEN,
PROFESSOR MAJOR.

Library Council:
PRESIDENT THOMPSON, *Chairman*,
PROFESSOR HUNT,
PROFESSOR DENNEY,
PROFESSOR ORTON,
PROFESSOR HUNTER,
PROFESSOR KAUFFMAN,
PROFESSOR WHITE.

Committee on Student Publications:
PROFESSOR J. R. SMITH, *Chairman*,
PROFESSOR BARROWS,
PROFESSOR CALDWELL.

Committee on Rules:
PROFESSOR SIEBERT, *Chairman*,
PROFESSOR HUNT,
PROFESSOR DENNEY,
PROFESSOR ORTON,
PROFESSOR HUNTER,
PROFESSOR KAUFFMAN,
PROFESSOR WHITE.

THE UNIVERSITY

OHIO STATE UNIVERSITY

HISTORY

The land grant made by the United States under an act approved by President Lincoln, July 2nd, 1862, provided that there should be granted to each State an amount of public land equal to thirty thousand acres for each Senator and Rrepresentative to which the State was entitled by the apportionment of the census of 1860. The proceeds under this act were to constitute a perpetual fund the capital of which was to remain forever undiminished and the interest of the same was to be inviolably applied by each State which should take and claim the benefits of the act to the endowment, support and maintenance of at least one "College where the leading objects shall be, without excluding other scientific and classical studies, and including military tactics, to teach such branches of learning as are related to agriculture and the mechanic arts, in such a manner as the legislatures of the states may respectively prescribe, in order to promote the liberal and practical education of the industrial classes in the several pursuits and professions of life."

Governor Tod, in November, 1862, brought the subject before the State Board of Agriculture and later to the attention of the Legislature. In January, 1864, Hon. Columbus Delano introduced a bill accepting the grant. This became a law February 9th, 1864, and pledged the faith of the State to the performance of all the conditions and provisions contained therein. In 1866, an act introduced by Hon. J. T. Brooks, was passed, which provided for the establishment of the Ohio Agricultural and Mechanical College, but the provisions were not carried into effect and a second act introduced by Hon. R. P. Cannon was passed in 1870 entitled "An act to establish and maintain an Agricultural and Mechanical College in Ohio." Under the provisions of this act the institution was located in Columbus and the Board proceeded to the organization of the college and the election of a Faculty of instruction, and the institution was opened for the reception of students on the seventeenth day of September, 1873.

In 1878 the legislature passed "An act to reorganize and change the name of the Ohio Agricultural and Mechanical College and to repeal certain acts therein mentioned." The act provided that the institution should be thereafter designated as "The Ohio State University." Up to this time but one appropriation had been made by the State for the support of the institution. With the reorganization came the larger and broader view of the State's relation to public education and since that time the Ohio State University has shared with other public educational institutions a more generous support by the State.

The governing body of the institution is a Board of Trustees, appointed by the Governor of the State and confirmed by the Senate, for terms of seven years, as provided in the law organizing the University. The original endowment has been supplemented, and the objects of the University promoted, by a permanent annual grant from the United States, under an act of 1890, by sepcial appropriations of the General Assembly; and in 1891, by a permanent annual grant from the State, which grant was doubled by the legislature of 1896. In accordance with the spirit of the law under which it is organized, the University aims to furnish ample facilities for education in the liberal and industrial arts, the sciences and the languages, and for thorough technical and professional study of agriculture,

engineering in its various departments, veterinary medicine, pharmacy and law. Through the aid which has been received from the United States and from the State it is enabled to offer its privileges, with a slight charge for incidental expenses, to all persons of either sex who are qualified for admission.

ORGANIZATION OF THE UNIVERSITY

The Ohio State University is divided into six colleges, as follows:

The College of Agriculture and Domestic Science consists of those departments representd in the course leading to the degrees of Bachelor of Science in Agriculture, Bachelor of Science in Horticulture and Forestry and Bachelor of Science in Domestic Economy, and in the Course in Dairying, the Short Course in Agriculture, and the Short Course in Domestic Science.

The College of Arts, Philosophy and Science consists of those departments represented in the courses leading to the degree of Bachelor of Arts, Bachelor of Philosophy, and Bachelor of Science. After June, 1902, all courses in this college will lead to the degree of Bachelor of Arts.

The College of Engineering consists of those departments represented in the courses leading to the degrees of Civil Engineer, Civil Enginer in Architecture, Engineer of Mines, Engineer of Mines in Ceramics, Mechanical Engineer, Mechanical Engineer in Electrical Engineering, and Bachelor of Science in Industrial Arts and Manual Training, Bachelor of Science in Chemistry or in Metallurgy; in the Short Course in Clay-Working and Ceramics, and in the Short Course in Mining.

The College of Law consists of those departments represented in the course leading to the degree of Bachelor of Laws.

The College of Pharmacy consists of those departments represented in the courses leading to the degree of Bachelor of Science in Pharmacy, and in the Short Course in Pharmacy.

The College of Veterinary Medicine consists of those departments represented in the course leading to the degree of Doctor of Veterinary Medicine, and to a certificate of Veterinary Surgeon.

Each college is under the direction of its own Faculty, which has power to act in all matters pertaining to the work of students in that college.

LOCATION OF THE UNIVERSITY

The University is situated within the corporate limits of the City of Columbus, two miles north of the Union Depot and about three miles from the State Capitol. The University grounds consist of three hundred and forty-five acres, bounded east and west by High street and the Olentangy river, respectively. The western portion, about 235 acres, is devoted to agricultural and horticultural purposes, and is under the management of the College of Agriculture and Domestic Science. The eastern portion is occupied by the principal University buildings, campus, athletic and drill grounds, a park-like meadow, and a few acres of primitive forest.

The grounds are laid out with care, ornamented with trees, shrubs and flower beds; and are so managed as to illustrate the instruction in Botany, Horticulture, Forestry, Landscape Gardening and Floriculture.

The University may be reached by either the North High street or the Neil avenue electric cars. Those wishing to go to the principal buildings of the University, to the residences on the grounds, or the Athletic field, should take a High street car going north. Those wishing to visit the Emerson McMillin Observatory, the Veterinary Hospital, Townshend Hall, Horticultural Hall and the Dormitories, will find the Neil avenue cars more convenient.

BUILDINGS

The University has fourteen buildings devoted to instruction, one Boiler House, one Power House, two Dormitories, six residences and some farm buildings. These buildings represent an investment for construction of about eight hundred thousand dollars. The equipment and apparatus amount to about one hundred and seventy thousand dollars. The land now occupied as a site with the farm is valued at one million five hundred thousand dollars. A new building for the College of Law is in process of erection and the funds are provided for a new building for the Department of Physics.

University Hall contains the Executive offices, the office of the Secretary of the Trustees, the assembly room (seating twelve hundred persons), four halls for literary societies, the Y. M. C. A. and Y. W. C. A. room, the Young Woman's League room and class rooms and laboratories for the departments of Economics, English Literature, German, Greek, History, Latin, Mathematics, Pedagogy, Political Science, Philosophy, Physics, Rhetoric and English Language, and Romance Languages. An electric passenger elevator connects all floors.

Mechanical Hall contains a room fitted up with cases for the care of models, samples of materials, instruments of precision, etc.; a room for instruction in experimental engineering and mechanism and draughting; and the steam, hydraulic, gas and pneumatic engineering and testing laboratories.

Botanical Hall has on the first floor the lecture room of the department of Botany. There are also an office, a store room, a dark room, and a private laboratory for Physiological Botany. On the second floor is the botanical museum, the main laboratory and the assistant's laboratory. Connected with this building is a large greenhouse and propagating house.

Electrical Hall devotes the first floor to the dynamo room. The floor of this room is of asphalt, laid on a solid concrete foundation. On the second floor are a lecture and draughting room, a photometric room, a library room, and office, stock and locker rooms.

Chemical Hall is now occupied by the departments of Chemistry, Mining and Metallurgy and Pharmacy. The department of Chemistry occupies the middle portion of the first floor and the middle and western portion of the second floor. The main lecture room has a seating capacity for one hundred and fifty students. The laboratory for introductory work and qualitative analysis has accommodation for two hundred and sixty-four students. There is also a special laboratory for qualitative analysis with accommodation for twenty-five students. The main quantitative laboratory accommodates fifty students. There is also an organic laboratory, a room for the preparation of experiments, a balcony accessible both from the lecture room and preparation room, a room for combustion work, a dark room for spectroscopic work, in addition to a number of smaller rooms used for private laboratories.

The departments of Mining and Metallurgy occupy the east end of the building. In the basement are the smelting furnaces, the assay laboratory, a room for rough work and store room for supplies. On the first floor is the lecture room of the professor of Metallurgy, with a seating capacity for forty; a laboratory with desks for sixteen students, a store room, a balance room, a private laboratory and an office. On the second floor is the lecture room of the associate professor of Mine Engineering, a draughting room, a room for instruments and an office.

The department of Pharmacy occupies the first floor and basement in the west end of the building, and has a lecture room provided for sixty students; a preparation room, a laboratory with desks for twenty-five students; a room for supplies, a balance room, a model drug store and a private laboratory.

ORTON HALL is designed for the permanent accommodation of the large geological collection of the University and for work and instruction in the department of Geology. A portion of it is occupied by the library and reading room. The building is two stories in height, with a high basement, is built of brick and faced with sandstone, and is fireproof throughout. At the right of the main entrance is the geological lecture room and professor's private room; at the left is the University library, reading room and librarian's private room. The central and rear portion is occupied by the geological and paleontological museums. The petrographical laboratory is located on the second floor. In the basement a room is used for work in geographical modeling, the finished models being afterward placed in the collection of such models in a room set apart for the purpose on the second floor. The basement accommodates also the museum of economic geology. A paleontological laboratory or working room is also provided on the second floor.

The greater part of the basement of Orton Hall is occupied as a laboratory by the department of Clay-working and Ceramics. This department is also accommodated with a large room on the first floor for recitation and exhibition purposes. In the rear of Orton Hall is a small brick structure used for the kilns of this department.

HAYES HALL is devoted to instruction in Industrial Arts, Drawing, Civil and Mechanical Engineering and Domestic Economy. On the first floor are two offices, the rooms of the department of Domestic Economy and two lecture rooms, the machine shop, the forge shop and the foundry. On the second floor are the carpenter and pattern shops and six large lecture rooms, with private rooms annexed.

The department of Drawing occupies the third floor for instruction in mechanical drawing and free-hand drawing and photography.

HORTICULTURAL HALL contains recitation rooms and indoor laboratories of the department of Horticulture and Forestry. An extensive greenhouse is attached.

THE VETERINARY HOSPITAL contains on the first floor a veterinary museum and library, a dispensary and two private rooms for the persons in charge. On the second floor are a class room, a bacteriological laboratory and a microscopical laboratory. The rear extension contains an operating hall and a room provided with stalls, cages, etc., for the care of animals under treatment.

THE EMERSON MCMILLIN OBSERVATORY is the gift of Mr. Emerson McMillin of New York. The first floor is divided by a hall and stairway into two parts. The east wing contains an office, library, clock room and a large, well-lighted room for the students, furnished with tables, where they reduce their observations and keep the records of their work. The west wing contains the transit house, the dome and photographic dark room. The transit house is a light frame structure, so designed as to be kept as free as possible from heat radiated by any heavy walls of masonry. The dome is a wooden frame-work, covered on the outside with canvas. The rest of the building is of pressed brick, the foundation and second story being "rock-faced."

TOWNSHEND HALL is devoted exclusively to the instruction given in the College of Agriculture.

On the left of the entrance is the office of the Department of Agriculture and a private office, a stenographer's room and fireproof vault. Connected with the office on the south is an assistant's room, opening into a laboratory for advanced students. At the extreme south end of this floor is a large laboratory for student-work in soils and farm crops. Connected with this laboratory is a balance room, a store room and an instructor's laboratory. On the west side of the main corridor, and connected with the instructor's room, is a large class room opening into a preparation room with a dark room. This class room is fitted with all

appliances for showing lantern slides of livestock, buildings, machinery, etc. On the same side of the corridor, and on the right of the stairway leading to the basement and second floor, are the class room and instructor's room for dairying. On the right of the main entrance is the department reading room. The north end of this floor is occupied by the museum with an attendant's room.

The north end of the high basement is occupied by the dairy department. This consists of a receiving room, a pasteurizing room, a store room, a refrigerator room, a lavatory, butter-making room, cheese-making room, two cheese-curing rooms and an instructor's room.

In the south end of the basement is a livestock room about forty feet square. One-third of this room is occupied by raised seats, the remaining floor space being used for exhibiting and judging livestock. Connected with this is a room fitted with stalls for the temporary accommodation of livestock when needed for class exercises. The basement also contains soil storage room, bath room, toilet rooms, repair shop, locker rooms, bicycle room and janitor's room. A small detached building will furnish steam and power for the dairy department. Detached from the main building, but connected with the soil storage room by a tramway, is a glass house for the study of soils and the experimental growth of plants.

The north end of the second story contains a large student laboratory for the department of Agricultural Chemistry, connected with an organic and analysis laboratory, a balance room, a store room and a private laboratory. The lecture room of this department is at the south end of this floor and will seat one hundred and sixty students on raised seats, with a preparation room adjoining. There is also on this floor a class room connecting with preparation room, store room and instructor's room, which is used (temporarily) by the department of Veterinary Medicine. There is also an extra class room, ladies' toilet and locker rooms and a hall for the use of the Townshend Society, designed to seat about two hundred persons.

Biological Hall is designed for the special accommodation of the departments of Entomology, Zoology, Anatomy and Physiology, and is fully equipped with all the latest and best apparatus for this work. It consists of a basement, in which is done all the work of preparation of subjects for the lecture tables and for the special laboratory work for the advanced students; the first floor, on which are lecture rooms, general and special laboratories, and private work rooms for the professor of Entomology and Zoology and his assistants; the second floor, similarly arranged for the work in Anatomy and Physiology; and a large wing, in which is the museum and a large lecture room. The building is fireproof throughout, and in design and general appearance is one of the most attractive on the campus.

The Gymnasium and Armory was first occupied in January, 1898. The drill hall and gymnasium floor is eighty feet wide by one hundred and fifty feet long. The roof is carried on curved steel arches, lighted from a clear story at the top. There is a running track around the entire room about twelve feet from the floor, back of which is a visitors' gallery seating about seven hundred persons. At the northwest corner of the floor is a stairway leading down to the men's locker and dressing room, while the young women go down a similar way at the southeast corner to their rooms. On the level with the main floor, near the main entrance at the south, is a large room for the use of the Commandant and his classes and rooms for the Director of the Gymnasium. Above the Commandant's room is the room for the officers of the University Cadet Corps.

The basement is very high and well lighted. On the young men's side are dressing and locker rooms, the bath room with shower and plunge baths, a bicycle room, a lecture room, the cannon room, the band room, and a large room, which

is to be the home of the University Athletic Association. On the young women's side are the locker rooms and bath rooms—precisely like those provided for the young men—a bicycle room, lecture room and private office for the instruction in sanitation and hygiene for young women.

THE NORTH DORMITORY is situated at the northern limit of Neil avenue, and fronts Eleventh avenue. It is at the terminus of the Neil avenue electric car line. It is a plain structure of brick, and affords accommodation for sixty-four students.

THE SOUTH DORMITORY stands near Neil avenue within a few rods of the North Dormitory. It is also built of brick, and contains rooms for twenty students.

RESIDENCES. There are seven dwelling houses upon the University campus. Five of these are brick and two are frame structures. One is occupied by the President of the University, five by professors, and the seventh is the farm house.

LABORATORIES AND EQUIPMENT

AGRICULTURE

The equipment of this department may be divided along three general lines: the plant, the museum and the illustrative materials.

THE PLANT. This consists of a farm of about two hundred acres, a general farm barn, a horse barn, and several small buildings. The farm lies along the Olentangy river, and includes both first and second bottom land. On this farm are grown general farm crops in the rotation deemed best suited to the circumstances of the Department. At present a few experiments are conducted, the general idea being to conduct such experiments as will have the largest instructional value to the students who attend the College of Agriculture. The Ohio Agricultural Experiment Station continues to conduct here the elaborate fertilizer experiments with wheat, corn and oats, which it has been making on this farm during the past five years. Different species and varieties of farm crops are grown to some extent for the purpose of class illustration and instruction, and it is expected to enlarge this feature.

Specimens of the draft, coach and roadster type of horse are kept and used in the farm work. The Department manages a milk dairy; having a herd of about forty cows, composed of pure bred and grade Jerseys and Shorthorns.

The general farm barn contains a well arranged stable for forty cows, with underground drainage and sewage cistern, a milk cooling room, a silo, a roof cellar, a work-shop, with room for hay, grain and other foodstuffs.

THE MUSEUM. This contains a large number of samples of farm products in various forms and their by-products, such as soils, grains, grasses, wools, cotton, forage plants and foodstuffs. Milling and other processes are illustrated by samples of the various products of manufacture.

The museum contains Auzoux models, samples of tools and a considerable miscellaneous collection. The collections are intended primarily for student use and not for display.

ILLUSTRATIVE MATERIALS. These consist of charts, pictures and lantern slides showing results of experiments, representative and noted specimens of livestock, farm machinery, fences, buildings, etc. The Department has and uses constantly in the class room a Beseler double oxygen-ether stereopticon. The collection of several hundred lantern slides for this purpose is constantly receiving additions.

THE AGRICULTURAL LIBRARY. While not considered as belonging specifically to this Department, there is in the general library a fairly good collection of books and periodicals devotd to agriculture, a large use of which is required of the student.

THE LABORATORY OF SOIL PHYSICS is located on the second floor of Horticultural Hall, and is supplied with apparatus for the mechanical analysis of soils and for testing their physical properties. (See also BUILDINGS — *Townshend Hall.*)

ARCHITECTURE AND DRAWING

The Department occupies the entire third floor and one room on the basement of Hayes Hall, consisting of: 1st. A large studio 35'x 80' for free hand drawing, ornament drawing, and pen drawing, provided with adjustable tilting tables, and easels, and lockers. 2nd. A large room 40'x 85' for architectural designing and mechanical drawing, provided with 95 O. S. U. drawing tables (30"x 36" tops) and lockers. 3rd. Color studio, provided with easels and material for still-life work in oil or water color, and lockers. 4th. Clay modeling studio 26'x 32', provided with modeling stands, casting table, moisture box, modeling box, modeling tools, a stove and vent hood for gelatine molds and lockers. 5th. For photography, a well-arranged and equipped dark room and work room provided with printing apparatus, copying cameras, sight view cameras, long, short and tele-photographic lenses, lens shutters and an excellent outfit for photo-micography. A lecture room equipped with stereoptican lantern is available. In addition to the above, the Department possesses models in plaster and wood illustrating the constructive and ornamental forms of the different styles of architecture, a collection of architectural photographs and lantern slides, a collection of architectural drawings and specifications of erected structures, a collection of plates of architectural forms and ornament, instruments for experimental work in heating and ventilating, such as anemometers, hygrometers, carbonic acid tester and thermometers. The heating apparatus of the several buildings provides valuable materials for this work. For drawing and color work the Department possesses a collection of good specimens of work, wooden models of geometric forms, plaster casts of fruit, flowers and the antique and material for still-life work. For mechanical drawing, a set of Schroeder models and a collection of shop drawings and facilities for blue-printing.

ASTRONOMY

The equipment consists of a twelve-inch equatorial telescope, mounting by Messrs. Warner & Swasey, objective by Mr. Brashear, with a large and powerful spectroscope by Mr. Brashear. This instrument is adapted to use either one or two prisms or a grating, and is provided with a double set of objectives, one corrected for the visual and one for the photographic rays; a positive micrometer with a seven-inch circle by Messrs. Warner & Swasey; a combined zenith telescope and transit instrument of three inches clear aperture by Mr. G. N. Saegmüller; a sideral clock by Clemens Riefler of Munich; a comparator by Carl Ziliss; a four-inch portable equatorial by Alvan Clark; a chronograph by Warner & Swasey; sextants, chronometers, meteorological instruments, etc. In addition to the above, Mr. McMillin's gift provides for an excellent astronomical library.

BOTANY

The general Botanical Laboratory occupies a part of the second floor of Botanical Hall. It is 23x33 feet, and is furnished with both movable and fixed tables. The latter are attached to the west and south walls near windows, suitably shaded. Water, gas and an evaporating hood are also provided. The laboratory is equipped with compound microscopes of the Baush and Lomb, the Leitz and other patterns; and accompanying each is a tray of tools and a case of reagents. There are more than fifty dissecting microscopes, also charts, and several minor pieces of apparatus for experiments in vegetable physiology. Three smaller rooms are also provided as laboratories for special work, as well as a dark room for photography. Other facilities for the illustration of the courses in botany, and for practical training in the same, are: A general herbarium, including flowering plants, ferns, mosses, fungi and algae; a state herbarium, a collection of fruits and seeds, val-

uable timbers, woods, grasses and various economic products of the vegetable kingdom; ornamental grounds ad woodland, planted with a large variety of evergreen and deciduous trees and shrubs; and a greenhouse with a fair collection of native and exotic plants. (See also MUSEUM — *The Botonical Museum;* and BUILDINGS — *Botanical Hall.*)

CHEMISTRY

The laboratories of the department accommodate from three to four hundred students. Each laboratory is equipped with all the necessary conveniences — water, gas, electric lights, distilled water piped from a large still in the attic, steam ovens, automatic air blasts, suction pumps, etc. The department is liberally supplied with the best apparatus and materials for both lecture room and laboratory work. Each student has his own desk with drawers and locker. All supplies are procured from the chemical store room, which has always on hand a complete stock of all necessary materials. (See also BUILDINGS — *Chemical Hall.*)

CIVIL ENGINEERING

The facilities provided for the illustration of the courses in civil engineering and for practical training are as follows: One high grade and three ordinary transits, four leveling instruments, solar compass, prismatic compass, improved telescope compass, Abney hand level, level and stadia rods, sight poles, chains, tapes; twenty-six improved drawing tables with 30″ by 36″ top; Schroeder's models in stereotomy of roof trusses; large set of models of wooden joints; collection of photographs of bridges, both when finished and in course of erection; collections of strain sheets and shop drawings of bridges; new improved cement testing machines and outfit for making all kinds of cement tests; stone mason tools for working models out of plaster blocks; magic lantern and slides; collections of samples of building materials; calculating machines; sets of drawing instruments; blue print room with outfit; sets of tracings of standard structures from which each student may make a set of blue prints. The equipment is growing each year by the addition of materials purchased, presented, or made by students of the Department.

CLAY-WORKING AND CERAMICS

The University was the first, and for some time, the only institution in the United States offering facilities for the study of clays, clay-working, and the chemical technology of the ceramic art. In the last two years other institutions have entered this field. The facilities of the Department comprise: 1st. A convenient chemical laboratory, specially designed and equipped for the analysis and decomposition of silicates. Provision has been made for the use of hydrofluoric acid with safety, and the platinum ware has been made to order with this purpose in view. 2d. A complete mechanical outfit for the preparation of clays for pottery manufacture and the production of the ware itself, of any grade from earthen wares to porcelain. The machinery is of the latest types and comprises all important varieties in use for grinding, tempering, washing, filtering and molding. 3d. A similar plant for the manufacture of brick, tiles, pipes and hollow goods. The machinery here is of full size and samples up to a ton in weight can be received and transformed into the finished article by any or all of the standard methods in commercial use. The power for this purpose is derived from a fine electric motor, driven from the University power plant. 4th. A kiln house, equipped with a kiln in which several hundred bricks, or an equivalent quantity of sewer-pipe, stoneware, or pottery can be burnt. The fuel is intended to be coke, except in special cases where the fuel available for burning clay wares is to be made the subject of test. There is also provided a crucible melting furnace and a muffle

furnace for testing glazes. A muffle kiln of large size for burning pottery, glazed ware and decorated wares has also been provided. 5th. A ceramic museum, containing a fine collection of American pottery and clay products of every class, is in process of installation. 6th. A library of the best literature on the subject, mainly German but containing a few English and French works, and the trade periodicals. (See also BUILDINGS — *Orton Hall.*)

The facilities of the Department for study in the field of cement and mortar materials comprise, in addition to the foregoing plant, much of which is especially well suited to this purpose, the following special apparatus: 1st. An improved dry-ball-mill, of chilled iron, for grinding the raw material together, and for grinding the cement clinker. 2d. A small cupola, fired with coke and using air blast, for the vitrification of the refractory silicates used. 3rd. A specially constructed flat-hearth furnace lined with magnesite, and fired with oil and compressed air, for burning cement where the process needs to be interrupted frequently to determine how far vitrification has progressed. 4th. Access to the complete and well-appointed cement testing laboratory of the Department of Civil Engineering.

These facilities permit the Department to offer exceptional opportunities to any who wish to specialize in this important field of manufacture. (See also BUILDINGS — *Orton Hall.*)

DOMESTIC ECONOMY

The Department of Domestic Economy (for young women) will secure for the course all that experience and observation may suggest. At present it has a large kitchen, with dining room adjoining, each fitted with the latest and best appliances for the work undertaken. About a thousand dollars has been expended to make this department entirely practical, and to permit its instruction to be thorough and scientific.

ECONOMICS AND SOCIOLOGY

The University, through the efforts and generosity of its friends, is possessed of a unique equipment for study purposes in these lines. This equipment comprises a large collection of railroad, municipal and school bonds; of stocks of all kinds; of letters of credit, drafts, foreign bills of exchange, bills of lading, checks, enclosures, statements, insurance policies, trust certificates, notes, mortgages and all the necessary forms of business paper; also collections of coins illustrative of various periods in our monetary history, foreign coins, and scrip; also sets of maps and charts and a Kiepert-Commercial Globe 80 cent. in diameter. Ample facilities for statistical work are provided and a seminary room set apart for the use of laboratory material, documents, etc., is always open to advanced students. It is the policy of the Department to make the statistical investigations and research work of advanced students contributory to the permanent equipment of the Department, thus enriching the facilities from year to year with material of scientific and pedagogical value.

ELECTRICAL ENGINEERING.

The Electrical Laboratory affords very good facilities for practical experimental work with dynamo machinery and other electrical apparatus. The dynamo equipment consists of twenty-five machines of various makes and sizes from 40 H. P. down; aggregating over 200 horse power. These include direct and alternating current generators, polyphase motors, arc and incandescent lighting generators, railway and station motors and unipolar dynamo. The latter, with an alternating current generator and a 2-phase motor, were built by the students; it being the policy of the Department to build as much of its apparatus as possible. There are also a number of transformers of different makes, including one for welding,—

built at the University. Arc lamps of different styles, a 10-kilowatt-hour storage battery, condensers and resistances, and magnetic testing apparatus also form part of the equipment. The list of measuring instruments is quite complete, and includes a standard Weston voltmeter and eleven other Weston volt and am-meters, also four Kelvin static voltmeters, five dynamo-meters, one watt-meter, three galvanometers and a dozen other am-meters and voltmeters of different makes. A telephone laboratory—with apparatus for comparative tests, a variety of transmitters and receivers, and lines running to another building, has been in use for two years. Photometry is given at present in the Physical Laboratory, where the equipment in this line is excellent. Power for running the dynamo laboratory is supplied by three induction motors from the University Power Plant. This latter is a model 2-phase plant, and the electrical part of it has been for the most part installed by the students of the Department. The repair and maintenance of this plant is done by the students, who receive compensation for the time so spent.

GEOLOGY

The University is able to present unusual advantages for the study of Geology. By an act of the Legislature it has been put in possession of all the collections made by the late Geological Survey, and these collections have been supplemented by valuable additions of fossils and minerals from various sources. The State collection embraces a very complete representation of every geological formation shown in Ohio. In its new and ample quarters the Department offers exceptionally good opportunities for work in the lithological, petrographical and modeling laboratories. (See also MUSEUMS — *the Geological Museum;* and BUILDINGS — *Orton Hall.*)

HORTICULTURE AND FORESTRY

Among the facilities provided for the illustration of the courses in horticulture, and for practical training in the same, are: (1) a collection of horticultural tools for budding, grafting, pruning, etc.; (2) an orchard, containing well-selected varieties of the apple, pear, cherry, plum and quince; (3) a small vineyard, containing numerous varieties of the grape; (4) a garden of small fruits, containing all the best varieties of the strawberry, raspberry, blackberry, currant and gooseberry; (5) a vegetable garden, with forcing houses, cold frames, experimental plats, conveniences for irrigation, etc.; (6) small nursery and forest tree plantations, with practice rows of budding, grafting, pruning and training; (7) ornamental grounds and woodland, planted with a large variety of evergreen and deciduous trees and shrubs; (8) a greenhouse, with a fair collection of native and exotic plants; (9) a collection of preserved natural specimens, and models of fruits, seeds, woods, etc.; (10) a laboratory fairly well equipped with balances, charts and other appliances for study and research. (See also MUSEUMS — *the Botanical Museum;* and BUILDINGS — *Horticultural Hall.*)

THE LAKE LABORATORY

The University maintains a lake laboratory at Sandusky during the summer vacation, where it occupies a convenient building, the former Hatchery building, 22x26 feet located by the city water works and close to the waters of the bay and convenient to good boarding places.

It has good facilities in the way of boats, tables, aquaria, collecting appliances, while microscopes, reagents, etc., are fully supplied from the home laboratory.

It offers for the coming season courses in botany and zoology outlined below, and also opportunities for special research in any branch of biology.

The professors of the departments of Botany and Zoology and Entomology with their assistants will constitute the staff of instruction.

The courses will be open to students and teachers generally and students of the University may receive credit for courses equivalent to University courses.

Investigators enengaged upon special problems relating to the fauna or flora of the region are given the privilege of the laboratory without charge but are expected to furnish their own microscopes or other sepcial apparatus unless otherwise arranged. For the courses of instruction, a fee of twenty dollars will be charged which will cover all expense of instruction; laboratory supplies and and use of boats and admit to full courses of eight weeks.

COURSES IN ZOOLOGY. (a) Laboratory and field courses including dissection of type forms, aquaria and field studies with instruction in collecting and preparing material for laboratory use and permanent collections. Special attention will be devoted to fishes and their food supply.

(b) Advanced courses in Invertebrate Morphology or Embryology.

(c) Special courses in Entomology, field and laboratory work.

(d) Special course in Ichthyology devoted particularly to the lake fishes, their habits and food supplies.

COURSES IN BOTANY. (a) Laboratory and field courses including a study of type forms. The course will consist of collection trips in the field where the common species of each class are found, classification of familiar forms, study of structure and special parts of interest in connection with each group, with methods of preserving and mounting for immediate use or permanent perservation.

(b) General Botany consisting largely of Morphology and Ecology.

(c) Laboratory course; the work to be arranged.

For further information write for special circular on Lake Laboratory.

MECHANICAL ENGINEERING.

The greater part of Mechanical Hall is devoted to laboratory purposes.

The south laboratory is used for applied mechanics and for gas engineering. Here are located the machines for testing the strength and elasticity of engineering materials, and recording their physical properties automatically and autographically. Oils are tested as illuminants and as lubricants. Belts and pulleys are tested for their slippage, friction and horse-power transmitted. The gas engine plant has three engines, representing gas and gasoline, three methods of ignition, and fly ball and inertia governors. The air is supplied by a fan through a large meter. Temperatures and pressures of air, gas and water are measured. The fresh and burnt gases are analyzed and their heating values determined by a calorimeter. The power is measured at both the indicator and the brake. The laboratory machine shop and tool room are in this room.

The north laboratory is used as a steam engineering and hydraulic laboratory. Four 35-horse-power engines give facilities for testing single and duplex condensing or non-condensing, simple or compound, throttling or automatic cut-off engines, using either a jet or a surface condensor. Pressure and vacuum gauges are calibrated. Indicator springs of five makers are tested either cold or hot. Five kinds of calorimeters determine the moisture in steam before and after passing three different separators. Injectors are tested for lift, quantity, pressure and steam consumption. Steam pumps of six makes, ranging to 800 gallons per minute capacity; two centrifugal and a rotary pump, enable tests of pumps to be made and deliver water at pressures below 150 pounds to two stand-pipes, which in turn supply turbine and cascade, and Pelton water wheels, and enable experiments to be made on the flow of water through orifices, pipes, valves, etc. Three cisterns, provided with a variety of weirs up to five feet wide, give practice in measuring flowing water. A Venturi meter and a Pilot tube are also used. Ericsson and

Rider hot air engines are tested. A Rife hydraulic engine, a Humphreys ram, Gem and Eureka water motors, and a pulsometer, are included in the hydraulic apparatus, all of which are connected and prepared for complete tests.

A complete set of Westinghouse air-brake apparatus, a blower and a ventilating fan, enable experiments to be performed in the flow of air. They are supplemented by tests of the heating and ventilating plants in the buildings of the campus.

In addition to the apparatus and equipment of the power plant of the University the power house at Townshend Hall contains a horizontal, return tubular boiler, two steam engines and an ammonia refrigerating machine, making the facilities on the campus for testing quite complete. Machinery, apparatus and appliances are continually being presented, built or purchased, and the student is given an opportunity to test everything under practical conditions of operation. Besides the laboratory facilities, opportunities frequently arise to test machinery, engines or boilers in the city, and in these tests the students take part.

The buildings of the power plant were completed in 1896, and, with their contents, form a model plant. The boiler room is 38 by 100 feet, and is equipped with five 150 H. P. boilers, with Babcock and Wilcox chain grates and Murphy automatic stoker. There are also coal and ash conveyors for the whole plant. At one end of the boiler room is the coal room, and at the other the pit for the hot well, from which runs the tunnel (about three-fourths mile in length), to the buildings of the University, carrying heat, gas and water-pipes and power, light and other wires.

Near the boiler house is the power house, 40 by 60 feet. The power generating plant consists of a 70 Horse Power McEwen compound engine, belted to a 60 kilowatt 2-phase Westinghouse Alternator, and a 200 Horse Power Watertown Compound, direct connected to a 125 kilowatt 2-phase generator. These occupy the main floor, together with a complete marble switchboard, with ammeters, voltmeters, wattmeters, static ground detectors, etc. A ten-ton traveling crane is available for handling the machinery in this room.

In the basement are condensers, which get their water from a large cooling reservoir at the side of the building. Here also are the transformers that convert the current to be used in the motors scattered over the campus, from 110 volts, at which it is generated, to 400 volts, at which it is transmitted.

There are installed on the campus over eighteen hundred incandescent lamps, twenty-four arc lamps and about 250 H. P. in motors. The electric plant is for the most part of the Westinghouse system. The buildings are of brick. Nearly all of the University buildings are heated by steam from this plant. The total cost of the plant for generation of power, light and heat, and for its transmission to the buildings, has been something over $100,000.

In order to facilitate experimental and research work in the direction of combustion of fuels under variable conditions as applied to steam generation, there was installed during the past year in the University boiler house, a most complete experiment boiler outfit. This equipment was furnished by Stillman W. Robinson, Emeritus Professor of Mechanical Engineering, who not only established the Department of Mechanical Engineering at Ohio State University and for many years was its head, but was the originator of the first Mechanical Engineering Department in this county connected with a state university, that at Champaign, Ill.

A Babcock & Wilcox boiler of 107 H. P., built for a working pressure of 200 lbs., with hand-fired furnace of the oven fire-brick type, is the principle of the system. The products of combustion after passing the boiler can be conducted direct to the open air by the chimney or otherwise, or into a Green's fuel economizer, where its 570 sq. ft. of heating surface transfers heat to the feed water

on its way to the boiler. The heat of the escaping gases can still further be absorbed by an air heater having 1,330 sq. ft. of heating surface. The heat thus taken up is transmitted to the air employed in the fuel combustion.

For promoting combustion, natural draft may be employed, or when greater intensity of draft is desired above that produced by the chimney, the latter can be cut out and a Surtevant induced draft fan, driven by a direct connected engine, brought into action. In combination with either mechanical, induced or natural draft, forced draft produced by a belt-driven Sturtevant fan may be employed, and the air forced into the ash pit may be taken from the boiler room direct, or by a system of underground flues be compelled to pass through the air heater on its way to the fan.

Weighing and collection tanks, in conjunction with a steam pump, supply the boiler with known quantities of water which flows by the way of the economizer or to the boiler direct. In this feed water system is a Hayden's feed water purifier with live steam heater, which may be used in conjunction with the economizer.

Draft intensity and temperatures are determined at many points throughout the system, a Le Chatelier pyrometer being used for high and mercurial pyrometers for low temperatures.

An Arndt's econometer indicates continuously the percentage of carbon dioxide in the escaping gases, while at the same time the Orsat's apparatus is used for giving absolute composition. The composition of the fuels employed and their calorific values are determined in the department of Metallurgy.

The plant as a whole admits of many combinations, thereby being able to meet almost every condition in practice.

METALLURGY.

The metallurgical laboratory has all the appliances for the most modern methods of technical analysis as practiced in iron and steel laboratories, including gas analysis. A furnace room in the basement is fitted for gold and silver assaying with improved muffle and crucible furnaces.

The lecture room in metallurgy has arrangements for projecting photographs of machines, mines and furnaces, for class illustration, and there is a large collection of such views. There is a photographic room with blue-printing facilities, where students learn to make copies of the drawings used in illustrating the lectures.

A collection of minerals and rocks with a large set of rock sections is provided for illustrating the mineralogy, as well as sets of blow-pipe apparatus for the students in determining mineralogy. (See also BUILDINGS—*Chemical Hall;* and MUSEUMS—*The Geological Museum.*)

MINE ENGINEERING.

The Department is equipped with all of the latest improved instruments and apparatus used in mine engineering, surveying and the study of mine ventilation. There is a collection of models of mine machinery and supplies, to which additions are being made which are valuable as illustrations. The draughting room is large, well lighted and provided with a desk for each student, where he is personally taught map making and the platting of actual surface and underground surveys; the making of tracings of drawings and how to make blue-prints. He is also taught the proper methods of keeping notes and all records necessary to an efficient engineers' office. The students are given practical experience by making actual surveys of coal mines and in working up their notes complete in all of the necessary details. The students are also taught how to make working drawings, plans, estimates and specifications of mining operations and equipment.

The lecture room has arrangements for projecting photographs of machines, mines and mine equipment, for class illustration, and there is a collection of such

views. Also photographic room with blue-printing facilities, where students learn to make copies of the drawings made by themselves and those used in illustrating the lectures.

PHARMACY.

The facilities provided for illustration of this work and for practical training are as follows: The apartments assigned to this work occupy the west end of the Chemical Hall, first floor and basement. The lecture room will accommodate sixty students, and is provided with a large lecture table and supplied with gas and water, and other conveniences for experiment. About the walls are arranged cases in which are exhibited rare and costly chemicals, curious drugs, and high-grade pharmaceuticals. Adjoining this room is the preparation room and store-room, where the supplies and apparatus and material are kept, and where the apparatus for experiment and illustration before classes is prepared. Also adjoining this room is the professor's private laboratory. The main laboratory has desks for thirty-five students, each one provided with gas and water, and sufficient storage space for material and apparatus. The laboratory is furnished with apparatus for distilling, and reclaiming, with mills, balances, drying closets, steam vaporizers, hoods and other special apparatus for pharmaceutical work. Opening into the laboratory is the drug store. This drug store is complete, and is in itself a cabinet of official drugs, and all preparations thereof. It is provided with a prescription desk and all apparatus adapted for training in prescription work. Adjoining the laboratory is the reading room, where are kept the various pharmaceutical journals, the dispensatories, and many books of reference. Also adjoining the main laboratory is the balance room, which is well provided with analytical balances, specific gravity balances and microscope, all of which are intended for higher pharmaceutical work.

In the reading room is also a cabinet of crude drugs, which have been classified and numbered but bear no name. This cabinet is adapted to the study of pharmacognosy.

In addition to the foregoing equipment, the Department is possessed of an extensive range of apparatus, by means of which any branch of work in pharmacy can be successfully pursued. The Department is complete in all its details, and affords unexcelled opportunity for the study of pharmacy. (See also BUILDINGS—*Chemical Hall.*)

PHYSICS.

The Department has an excellent equipment of apparatus, to which additions are constantly being made. The apparatus includes a large collection of pieces for illustration of the general lecture room work, but is principally chosen for accurate measurement in the laboratory. A set of standards of length, capacity and mass, sent under the act of Congress supplying such sets to the several agricultural colleges, is in the possession of the Department. The pieces are copies of the United States standards made by the Coast Survey at Washington.

Among the principal pieces of apparatus are a dividing machine by Fauth & Co.; chronometers by Parkinson & Frodsham and by Negus, the latter a break-circuit; a chronograph by Fauth & Co.; a Hipp's chronoscope; cathetometers by Salleron and by the Geneva Society, the latter an exceptionally fine instrument; Regnault's apparatus for vapor tension, for expansion of gases and for specific heat; Melloni-Tyndall apparatus for radiant heat; standard thermometers by Paudin and others; Rutherford and Rowland, different gratings; Rowland's spectrum photographs; spectroscopes by Brashear, Browning, Apps and others; Duboscq's complete apparatus for projections in polarized light; lanterns for projections by the lime light and the arc light; a variety of sound apparatus from Koenig; portable and quadrant electrometers; Kelvin galvanometers of high and

low resistance; Weidemann, Kohlrausch and other galvanometers; standard resistance coils, with Cavendish laboratory certificate; several sets of resistance coils and bridges; a Kew magnetometer; Kelvin standard balances; Weston ammeters and voltmeters; standards of self-induction; standard battery cells; photometric standards and photometers; X-ray apparatus, etc.

Under the laws of Ohio, the professor of physics is *ex officio* State Sealer of Weights and Measures, and all of the standard weights, measures and balances received from the United States government are in the rooms of the Department.

PHYSIOLOGY

The facilities provided for the study of anatomy, bacteriology, histology and physiology are excellent. The laboratory is supplied with skeletons, papier-mache manikin, and many models, including models of the eye, ear, larynx, etc. The apparatus of the Department for work in bacteriology and physiology is of the best and most approved construction, and is adapted to the accurate investigation of bacterial form, as well as to the thorough performance of the fundamental physiological experiments. Myographs, spectroscopes, microscopes and the necessary chemical outfit are also provided. For work in histology the equipment includes twenty-four individual tables for student experiments, each table being supplied with a good microscope, microscopical accessories, microscopical reagents; and for advanced work, the needed apparatus for instruction in the various methods of hardening, staining, imbedding, section-cutting and injection. The laboratory also has excellent microtomes, imbedding baths and other essentials of a histological outfit. The equipment of the laboratory makes it possible to offer a large range of work for the choice of students in advanced courses. (See also BUILDINGS — *Biological Hall.*)

PSYCHOLOGY AND EDUCATION

The psychological laboratory occupies three rooms on the fourth floor of University Hall and is reasonably well equipped for work in physiological and experimental psychology and for research in related educational lines. For the study of motor processes ad development the most improved form of ergograph with complete sets of myographic, chronographic, dyamometric and pneumatic recording appliances, has been provided. A complete outfit of apparatus for the study of sensation, memory and association make it possible for students of education to acquire methods of exact observation of the various mental and motor processes involved in school work. Provision has also been made for work in comparative psychology.

SHOPWORK

The shops, which occupy the north wing of Hayes Hall, afford excellent facilities for instruction in both the practical details and the underlying principles of carpentry, pattern-making, forging, moulding, foundry work and machine work.

The carpenter and pattern shop is equipped with twenty-five benches with complete sets of carpenter tools for each and a large number of special tools for general use, twenty-three pattern-makers' turning lathes with cupboards containing the necessary turning and pattern-making tools under each, an eight-foot pattern-maker's lathe with compound rest, a pony planer, a buzz-planer, a circular rip and cross-cut saw, a scroll saw, a trimmer and a power grindstone.

The forge shop is equipped with twenty stationary forges with anvils and tools for each, a heating forge, a portable hand forge, a foot-power hammer, a blacksmith's drill, and punch, shear and bar cutter. The blast for the forges is furnished through underground piping by a 45-inch Buffalo pressure blower, and

the smoke is removed by a 55-inch Buffalo exhaust fan overhead. Both of these fans are driven by a 15-horse-power electric motor.

The foundry is equipped with a 24-inch Colliau cupola, the blast for which is furnished by a 30-inch Buffalo blower; two brass furnaces, one 16 inches in diameter and the other 20 inches in diameter; a core oven, benches for iron and brass moulding, core making and cleaning of castings, a space for floor moulding 30 feet by 40 feet, besides all the necessary moulding tools, flasks, crucibles, ladles, tongs, etc.

The machine shop is driven by a 30-horse-power electric motor from above, and is equipped with the following tools: Twenty-eight benches for vise work with complete sets of tools, eight speed lathes, sixteen engine lathes, a Fox monitor turret lathe, two planers, two shapers, a milling machine, an upright drill, a sensitive drill, grinding machines for both plane and cylindrical surfaces, tool grinders, emery wheels, etc. This machinery is furnished with all the necessary tools, and the tool room is equipped with full sets of drills, taps, dies, milling cutters, standard plugs, gauges, threads, etc., micrometers and a great variety of special tools. (See also BUILDINGS — *Hayes Hall.*)

VETERINARY MEDICINE

The Veterinary Hospital affords excellent facilities for the treatment and care of animal patients, and also gives the students the opportunity to become practically familiar with the diseases to which our domesticated animals are subject. It contains box stalls, stall for cold water applications, a large and well lighted operating hall and a special ward for dogs. The front part of the Hospital contains a lecture room, a museum of anatomical and pathological preparations, a drug dispensary and an office. In the museum are skeletons of the horse and ox, a complete manikin of the horse, papier-mache models of various anatomical parts, pathological specimens preserved in alcohol, etc.

In the library are choice collections of works in veterinary medicine and allied sciences and also copies of the leading veterinary periodicals.

The College is well equipped for surgical work. Instruments of the latest and most approved makes are kept in the instrument room for use in operations.

In the daily clinics not only are horses and dogs presented, but also the meat-producing animals from the barn, near the College.

The bacteriological laboratory in the biological department is supplied with apparatus of the most modern and improved construction, the microscopic appliances being adapted to the most accurate work in bacteriology. (See also BUILDINGS — *The Veterinary Hospital Biological Hall.*)

ZOOLOGY AND ENTOMOLOGY

Instruction in this department is largely by the laboratory method with lectures and use of text or reference books, the effort being to lead the student to observe and think for himself. The various courses are intended to provide instruction in the elements of the science, familiarity with methods of study and investigation, and opportunity for special research involving field, laboratory, museum and library work. The adjacent fields, wood, lake and river; the various well equipped laboratories, extensive collections and libraries furnish excellent opportunities for every phase of the study.

The Department occupies the first and third floors of the fine new Biological Hall providing two lecture rooms, one general and five special laboratories, museums, offices for professor and assistants, besides room for storage, workshops, aquaria, cold-storage, photography, etc. The laboratory equipment includes microscopes, microtomes, incubators, injectors, etc., for most approved methods

of work in morphology, embryology and neurology. The collections include a fine series of skeletons, a number of large mammals, series of the birds of Ohio, of the birds of North America, of Ohio fishes, of mollusks and especially rich collections of insects particularly in Odonata, Hemiptera and Diptera. (See also THE MUSEUMS — *The Zoological Museum, Biological Hall.*)

The Lake Laboratory maintained at Sandusky and open during the summer vacation offers courses of instruction and exceptional opportunities for original investigation in a very interesting and delightful locality. (See Lake Laboratory.)

THE MUSEUMS.

THE GEOLOGICAL MUSEUM of the University has been collected and arranged with reference to instruction rather than to display. The basis of it is a large and comprehensive collection of the rocks, fossils and economic minerals of Ohio. The collection embraces the following named series:

(a) An excellent representation of the leading divisions of the geological scale of the State, so far as it can be illlustrated by rock specimens. The specimens represent the leading phases of each formation, and in many cases carry the characteristic fossils of the horizons from which they are derived.

(b) A collection of the animal and vegetable fossils of the rocks of Ohio. This series includes a large majority of the described fossils of our formation, and in the number are many type specimens. While all the ages of our geological history are well represented, the collection of the Upper Silurian and Devonian animal fossils is particularly rich and complete. A remarkably fine series of coal plants is also included in the museum. The list of fossils has been greatly extended in the number of species and individuals by the recent purchase of the collection of Mr. Henry Moores, of Columbus.

(c) The economic minerals of the state are also shown to excellent advantage in the museum. The coals, petroleums, iron ores, clay and building stones produced in Ohio are represented in large collections. Many of the specimens upon which chemical examinations or physical tests have been based in the work of the geological survey of the State are included here.

(d) Petrographical collections: These collections were selected with a view to their use in petrographical instruction, and embrace the Hawes collection, the Krantz collection and the Rosenbusch complete series of typical rock specimens from important centers abroad. These hand specimens are supplemented by two series of thin sections, including Voigt and Hochgesang's collections of typical rocks and of the petrographically important minerals.

In addition to the collections above described, the museum contains a great deal of valuable material in the line of general geology and mineralogy. Among other things it includes several valuable suites of ores and many fine mineral specimens.

There also belong to the museum a number of geoolgical casts, models and maps. In this series are included a relief map of the State of Ohio, and also the models of the basins of the Atlantic ocean and Caribbean sea, prepared under the supervision of the United States Coast and Geodetic Survey.

The catalogue of the museum contains more than 10,000 entries; but as only one number is as a rule given to a fossil or a mineral species, the individual specimens make an aggregate list of many thousands in addition to the catalogue list, and probably double this list.

The skeleton of a mastodon, one of the extinct elephants of Ohio, has recently been presented to the museum by N. S. Conway, of Catawba, O., on whose farm it was found. It has been mounted by Prof. H. A. Ward, of Rochester, N. Y., and proves to be one of the largest in the country.

The museum also has a mounted skeleton of *Megalonyx Jeffersonii*, one of the great ground sloths. This specimen has the distinction of being the first and thus far the only mounted skeleton of this animal in the world. The bones were discovered by Abraham Drushell and others in a swamp in Berlin township, in Holmes county, Ohio, in 1890. They were mounted in Ward's Natural Science Establishment, Rochester, N. Y. The entire outlay involved in the purchase of the bones and in mounting them was borne by Mr. Emerson McMillin, of New York.

THE ZOOLOGICAL MUSEUM is located on the ground floor of the wing of Biological Hall. The foundations of a zoological museum have been laid and the work begun on a generous plan. Every effort is being made to secure and preserve excellent specimens in all groups of animals. Not only the adult animals are preserved but the preparatory stages as well, their work and architecture, in fact all that can illustrate the life-history and habits.

Among special features are the Wheaton collection of birds of Ohio, numbering about 1,000 skins; a collection of North American birds, about 1,500 skins, representing very fully the North American fauna; a number of fine specimens of larger mammals, moose, hippopotamus, deer, tiger, pecary, lion, tapir, etc., most of which have been generously donated by Sells Brothers; a collection of about 3,500 molluscan shells; a fine series of Ohio fishes; numerous reptiles, amphibians, etc.

There is an excellent series of skeletons, crania and alcoholic material for courses in comparative anatomy.

The collection of insects is being rapidly enlarged and the purchase of the Kellicott collection of Odonata makes it especially rich in that order.

Professor Osborne's private collection of Hemiptre is deposited in the Department and available to students for comparison and study.

THE BOTANICAL MUSEUM occupies the second floor of Botanical Hall. It contains the general University herbariums, and the State herbarium, over 30,000 mounted sheets, also Professor Kellerman's private herbarium of over 20,000 specimens reposited for use in the Botanical department; a complete collection of the native woods of Ohio; a collection of the seeds and fruits of plants; a collection of native medicinal plants; a general collection of vegetable products, including seeds, textile fabrics, coloring substances, etc., illustrating economic or applied botany.

THE AGRICULTURAL MUSEUM. For a description of this museum, see BUILDINGS—*Townshend Hall.*

THE ANATOMICAL AND PATHOLOGICAL MUSEUM. For a description of this museum, see Laboratories and Eqiupment, Veterinary Medicine.

THE MUSEUM OF CLAY-WORKING AND CERAMICS is now in process of formation. Some excellent specimens of ceramic products have already been collected, and efforts are being made to increase the collection.

ARCHAEOLOGICAL COLLECTION. Orton Hall now contains the second best archæologic exhibit in the Ohio Valley, the total number of specimens owned by the Ohio State University, the Ohio State Historical and Archæological Society and by private individuals, amounting to 46,200. Although the Museum is but three years old, it has shown a remarkable growth.

Field work has been carried on in various parts of the State during the summers of 1894, 1895 and 1896, and as a result the contents of more than eighty mounds, graves and village sites are now on exhibition. The chief exhibits, illustrating the life of ancient tribes are from Fort Ancient in Warren county, from the mound graves of the lower Scioto and from the Muskingum Valley. It is considered that in Ross county aboriginal culture reaches its highest development in the whole Ohio Valley. This fact is well attested by the presence of numerous copper

objects, effigy pipes, fine ornaments and ceremonials, pottery, delicate work in polished stone and flint implements, etc.

The collection from the valley of Brush Creek and along the Ohio itself, and from the hill regions of Ohio, show a much lower grade of culture. Careful comparison of the work of man from these localities is exceedingly interesting.

There is an exhibit from Flint Ridge, illustrating the manufacture of arrow and spear heads. The Museum contains nearly 150 specimens of pottery from Missouri and Arkansas, many of which are effigies of animal, bird and human form.

The founders of the Archæologic Museum are arousing public interest in the preservation and study of Ohio antiquities; and by means of exchanges, lectures and personal solicitation, the growth of the collection is considerable.

LIBRARIES

THE UNIVERSITY LIBRARY

The University Library, containing about forty thousand volumes, is located in the east end of Orton Hall. The system of department libraries prevails to a limited extent, small collections of books specially needed in connection with laboratory and class room work being deposited in several departments.

During term time the Library is open six days in the week, legal holidays being excepted. From Monday until Friday the hours are from 7:30 a. m. until 9:30 p. m.; Saturday from 7:30 a. m. until 4 p. m.

The management of the Library is vested in a Library Council, which is composed of the President, the Librarian and the Deans of the six colleges.

STATE LIBRARIES

Students are privileged in being near the two State libraries.

The Ohio State Library numbers about 70,000 volumes and is a circulating one for all the citizens of Ohio. It occupies a room in the State House.

The State Law Library, also in the State House, is the largest and most complete law library in the State. It contains complete sets of the English, Scotch, Irish, Canadian, United States and State reports, statutes and digests. The important legal periodicals are on file.

CITY LIBRARIES

The students of the University, as residents of Columbus, have access to the City Library and the Public School Library, under the usual regulations. The City Library numbers 28,000 volumes. It has specially pleasant reading and reference rooms. The Public School Library numbers 35,000 volumes, and is a well selected collection of books. Students will find both libraries valuable in supplementing the University Library.

SPECIAL LIBRARY IN ECONOMICS

The University possesses a special library in Economics consisting of several hundred volumes and pamphlets. Over thirty financial, commercial and trade journals are received and filed regularly. The business men of Columbus have contributed over $1,200 for the equipment of this commercial library.

SPECIAL LIBRARY IN ZOOLOGY AND ENTOMOLOGY

The Department of Zoology and Entomology possesses a special library the nucleus of which was the scientific library of the late Prof. Kellicott which was generously donated to the Department. This has been increased by gifts of special

papers by a number of the leading investigators of the country and will be enlarged as rapidly as possible. The private library of the professor is also accessible for reference.

AIDS TO MORAL AND RELIGIOUS CULTURE

One of the most commendable organizations in the University is a branch of the International Young Men's Christian Association, organized in 1883. This association is directly affiliated with the work for young men directed by the college department of the State Y. M. C. A. work. Services are held weekly and voluntary classes for Bible study are successfully organized. The local association has a secretary who devotes his entire time to work among the young men. The management has rented a house at Highland and Eleventh avenues as headquarters for the Association. It is hoped that in the near future a permanent home for the Association may be provided.

An equally commendable organization is the Y. W. C. A., affiliated with the State organization. Religious meetings are held regularly at noon on Tuesdays. Occasionally meetings for social purposes are held as provided for by the organization. Both of these organizations are worthy of public consideration.

New students are invited to write to the address below for a hand book of information concerning the University or for information concerning rooms, boarding or employment. Address Y. M. C. A. Secretary, Ohio State University, Columbus, Ohio.

THE CONVOCATION

At the opening of the year in September, 1900, the daily chapel exercises were abandoned. As a substitute for the short daily exercises an entire hour is now devoted to a convocation at which the president presides. In addition to devotional exercises an address is delivered upon some suitable topic. During this hour the libraries and laboratories are closed and no other University exercises occur. It is expected that the Faculty and students will attend. The hour is definitely fixed at ten o'clock on Wednesday of each week. The public is always welcome at the Convocation.

LITERARY AND OTHER SOCIETIES

The Alcyone Literary Society, open to young men, was founded in 1874; the Horton Literary Society, open to young men, was founded in 1875; the Athenæan Literary Society, open to young men, was founded in the winter of 1896–'97. The Browning Literary Society, founded in 1883, and the Philomathean Literary Society, founded in 1894, are open to young women. These societies have commodious and well furnished apartments in University Hall. They meet weekly, and their work, offering to the student a very desirable training in composition, public speaking, and parliamentary order, is a valuable adjunct to collegiate education.

The Townshend Literary Society was established in 1883 as a technical society under the name of the Kirtland Agricultural Society. In 1894, the name Townshend was substituted. In 1898, the Society changed its constitution so as to admit any student of the University and thus became a literary rather than a technical society. It meets weekly in its commodious and well arranged society room in Townshend Hall.

The Biological Club is an organization of professors and students for mutual assistance and improvement in the line of natural science. Its meetings are regularly held every two weeks, at which papers are read, notes of observation and research presented, and current biological literature discussed.

The Chemical Association, composed of the more advanced students and instructors in the Department of Chemistry and Pharmacy, has for its object the

discussion of such subjects as are of importance to students of chemistry, special stress being placed on recent discoveries. The meetings are held semi-monthly and are of great interest. Both professors and students contribute to each program.

The Political Science Club is an organization of instructors and students in political science and history for the consideration of questions in those fields. At the regular bi-weekly meetings papers are read, researches reported, and current questions and publications in political science, considered and discussed.

The engineering Society is a similar organization of students and instructors, holding meetings bi-weekly, for the consideration of questions in the various branches of engineering.

The Organic Evolution Club was organized in the winter of 1896-97 by those students and members of the Faculty especially interested in the study of Evolution. The Zoological Department has a similar club known as the Journal Club.

The O. S. U. Dramatic Club was organized in 1893. Its object is to present each year to the University world one of the standard legitimate dramas. Its membership is confined to University circles.

The musical organizations of the University are: The O. S. U. Glee Club, composed of sixteen members; the O. S. U. Mandolin and Guitar Club of twenty members; the O. S. U. Banjo Club of five members; the O. S. U. Orchestra of fifteen members; the O. S. U. Male Quartet and the University Cadet Band.

The Ornithological Club encourages observation and research in the study of birds and their habits, especially of our native species. The Wheaton collections in the posession of the University form a basis of study. The programs consist of papers and discussions and reports of observation and personal work. Anyone interested in birds is eligible to membership and visitors are always welcome. The Club meets on the second and fourth Monday evenings of each month.

The O. S. U. Sketch Club has for its purpose the promotion of art interests among the students and ex-students. Any one who is or has been connected with the University in any capacity is eligible to membership. The members meet once a week and sketch from the draped human figure. Twice a month the members present sketches illustrating some word, etc., previously selected. All work is criticised by members of the club for mutual benefit.

The English Club, composed of the instructors and advanced students of the English departments, holds bi-weekly meetings at which new books in current literature are discussed and papers on literary topics are presented.

The William F. Hunter Society, in the College of Law, meets for moot-court practice and quiz-work every two weeks.

MILITARY SCIENCE AND PRACTICE.

Under the law of Congress establishing the University, it is required that instruction shall be given in military science and tactics. In accordance with this provision an officer of the regular army has been detailed to take charge of the Department of Military Science and Tactics; and the Trustees have directed that all male students, except those in the College of Law, and such others as may be specially excused for physical disability or for having reached the age limit of twenty-five years, shall render two years of cadet service. Special students are required to take the cadet service. From the opening of the year until Thanksgiving recess cadet service is requird four times a week; from Thanksgiving until Spring recess cadet service is required twice each week and gymnasium practice twice; from the Spring recess until the first of June cadet service is required four times each week. A uniform has been prescribed with which each member is required to provide himself; and fifty minutes a day are devoted to drill, except on those days when instruction in tactics and art of war is given.

The course of instruction is both practical and theoretical. It is given by means of a systematic drill, supplemented by lectures and recitations, and is so arranged as to occupy five hours per week throughout the year. For purposes of drill, all students enrolled in the Department are organized in a battalion, the officers of which are selected from those students who have shown special proficiency in their University work and the work of the Department. Commissioned officers and non-commissioned officers receive certificates of satisfactory service, issued by the University. A cadet band has been organized in connection with this Department, and is supplied with instruments belonging to the University and to the cadets.

The practical course in infantry embraces all the movements prescribed by the drill regulations of the U. S. Army applicable to battalion. Instruction in artillery embraces such portions of the United States drill regulations as pertain to the formation of detachments, manual of the piece, mechanical maneuvers and aiming drill. Instruction also includes duties of sentinels, the various ceremonies performed by troops, and military signaling. The theoretical instruction includes a systematic and progressive course in drill regulations of the U. S. Army, the organization and administration of the U. S. Army and the elementary principles governing in the art of war.

Competitive drills are held yearly for two medals; one, the first prize, of gold, presented to the University by the M. C. Lilley Co., of Columbus, Ohio; the other, the second prize, of silver, presented by Lieut. Wilson, when commandant. These medals remain the property of the University, the winner wearing them until the next competition. The "President's Prize" consists of an officers' sword, given to the captain of the company having the best record for attendance for the year.

The equipments of the Department consist of three hundred Springfield cadet rifles and sets of infantry equipment, twenty officers' swords and belts, the necessary equipment for instruction in signaling, and a few instruments for the band.

The U. S. Ordnance Department furnishes an annual allowance of one thousand rounds of ball and one thousand rounds of blank cartridges for cadet rifles.

PHYSICAL EDUCATION.

The physical education is given by the director in charge, assisted by Miss Berryman, who has charge of the work for the young women. The large drill hall is used by the women in the forenoon and by the men in the afternoon.

The exercising floor, 80 x by150 feet, is thoroughly equipped with the best apparatus in duplicate. The running track is fourteen laps to the mile, with graded elevations at the curves to meet the requirements of the different rates of speed. The track is laid with felt an inch in thickness, three and a half feet wide and covered with rubber coated canvas.

The work is required for the first and second year students. The course consists of theoretical and practical work in the gymnasium, and includes calisthenics, light and heavy gymnastics, physiology of exercise, physical examinations and measurements. It is intended to give the student such a training in the methods of Physical Education that he may have a comprehensive knowledge of the subject.

A thorough physical examination of each student is made at the opening of the year, and the measurements are outlined on charts, so as to show the part below the normal development, for which special exercises suited to the health and physical condition of each individual will be suggested. These charts are constructed from the accumulated data of several thousand measurements of college students. Experience demonstrates that the body, as well as the mind, is susceptible of right and wrong development. Every part of the body can be

strengthened and increased and the relation of one part to another can also be changed so as to correct imperfections.

Class leaders who act as floor aids are selected from among those who show a proficiency in the work. These students are given a certificate of their appointment as Aids, and the letter A in scarlet, which they are entitled to wear on their gymnasium suits.

It is the aim of the department to secure health, vigor and such harmonious development of the body as will fit it to resist disease and prepare it for efficient service, both now and later in life.

The gymnasium is free to all students, but those desiring a locker will be charged a fee of one dollar a term.

OHIO FORESTRY BUREAU

This Bureau has been established and located at the University by the Legislature for the purpose of inquiring into the best means of preserving and utilizing the forests of the State.

TERMS AND VACATIONS

The first term of the University year begins on the Tuesday following the sixteenth day of September and closes on the Wednesday following the 17th day of June. The first term closes on the Wednesday preceding Christmas; the second term begins on the Tuesday following the first day of January and closes on the Friday preceding the first Monday in April; the third term begins on the Wednesday following the close of the second term. The second semester begins on Monday of the eighteenth week preceding commencement week; and the first semester closes on the Friday preceding the opening of the second semester.

Regular college exercises are suspended from 4 o'clock p. m. of the Wednesday preceding Christmas until 8 o'clock a. m. of the Tuesday following the first day of January; on Thanksgiving and the day following; on University day, which is the twenty-second day of February; from 4 o'clock p. m. of the Friday preceding the first Monday in April until 8 o'clock a. m. of the Wednesday following the first Monday in April; and on Memorial Day.

FEES

INCIDENTAL FEE. — A charge of eighteen dollars a year is made against all students, under the head of incidental expense. In the case of former students if this fee is not paid until the second day of the term one dollar will be added, and for each succeeding day of delinquency fifty cents will be added.

LABORATORY FEES. — Students in the laboratories and shops are required to pay fees to cover, in part, the cost of the material consumed, and the deterioration of the expensive instruments used by them. First year students are also required to make a deposit of five dollars at the beginning of each term at the Chemical Store Room to cover the cost of laboratory supplies.

The rules of the Trustees provide for the return of fees only in cases of prolonged illness or of unforseen calamity.

The fees charged per term in the laboratories mentioned below are as follows:

Agriculture, 6	$10 00
" 15	5 00
Anatomy and Physiology, 4, 9, 11	5 00
Botany, 3, 4, 6, 7, 8, 11, 16, 21, 22, 23	2 00
" 24, 25, 27, 29	2 00

Ceramics, 1, 2, 3	$1 50
" 9, 10, 11	5 00
Chemistry, 1, 2, 7, 9, 12, 13, 15, 17, 20, 22, 27, 29	1 50
Domestic Science, 1, 2, 3, 4, 11, 12, 13	5 00
" " 5, 6, 7, 8, 9	1 00
Drawing, 7	2 00
Elec. Engineering, 4, 5, 4 or 5hrs., $7.00; 3 hrs. or less	5 00
" " 6 and 7 combination	5 00
Law when elected 5 hours or less, per semester	7 50
Metallurgy, 3, 5, 6	1 50
Mechanical Engineering, 12, 14, 15, 17, 24, 25, 27, 28, 29, 30	5 00
Pharmacy, 7, 8, 9, 10, 11, 15, 17, 18	1 50
Physics, 12, 13, 15, 3 hrs., $5.00; over 3 hrs	7 00
Shopwork, 4 hrs. or less	5 00
Shopwork, 5 hrs. or more	7 00
Zoology and Entomology, 2, 12, 13, 14, 23	7 50
Zoology and Entomology, 4, 7	1 00

The fees of the College of Law are $30 per semester, including the usual incidental fee.

In the laboratories of the Department of Chemistry and Agricultural Chemistry, each student is required at the beginning of each term to pay a fixed charge of one dollar and fifty cents for gas and water. First year students are also required to make a deposit of five dollars at the beginning of each term at the Chemical Store Room to cover the cost of laboratory supplies. The rules of the Trustees provide for the return of fees only in cases of prolonged illness or of unforseen calamity. He is also required to buy his own supplies, as he needs them, at the general storeroom in Chemical Hall, where laboratory supplies are sold to students at first cost to the University.

All term dues must be paid at the opening of each term as a condition of admission to classes.

AUDITOR'S FEE

On presentation to the Bursar of the written consent of the head of a department, and on payment to the Bursar of an auditor's fee of one dollar, any person engaged in teaching is permitted to attend, in that department, any class or course (not to exceed three hours a week for one-half year) which is announced to be especially for teachers or those intending to teach.

GRADUATION FEE. — A fee of five dollars, to cover expense of graduation, diplomas, etc., is required of each person receiving one of the ordinary degrees from the University, and this fee must be paid before the degree is conferred. A like fee of ten dollars is charged to each person receiving one of the higher graduate degrees.

FREE SCHOLARSHIP IN AGRICULTURE AND DOMESTIC SCIENCE, AND IN VETERINARY MEDICINE. — A free scholorship good for two years is granted to one student annually from each county in Ohio. If in any county there is no applicant for the free scholarship in the College of Agriculture and Domestic Science, then a free scholarship, good for two years in the College of Veterinary Medicine, may be granted. Each scholarship is valid two years from its grantal and covers the incidental fee, but the person appointed to receive its benefits is subject to all the conditions prescribed for admission to the course. Students taking laboratory work are required to make a deposit to cover materials broken or used up, the same as other students. The free scholarship cannot be used in the special winter term course in dairying. The appointments are made by the County Boards of Agriculture, and are not transferrable by the appointees. To learn whether the scholarship of a given county for the current year has been

granted, inquiry should be adressed to the Secretary or President of the County Agricultural Society. For further information concerning these scholarships, inquiries should be addressed to the Dean of the College of Agriculture and Domestic Science.

THE COLLEGE OF LAW

INCIDENTAL FEE. — An incidental fee of fifteen dollars per year is charged to regular undergraduate students.

Upon payment of the incidental fee, law students will be admitted to all the privileges of all the other Colleges of the University, upon the same terms as to admission, discipline, character of studies selected, etc., as other students in the University.

TUITION FEE. — In addition to the incidental fee named above, a tuition fee of twenty-two dollars and fifty cents per semester is charged to regular undergraduate students.

GRADUATE FEE. — A graduate fee of fifteen dollars per semester, payable in advance, is charged to all who take the full graduate work.

DIPLOMA FEE. — A fee of five dollars (to cover the expense of graduation, diplomas, certificates, etc.,) is charged to all who receive the diploma or certificate, and a fee of ten dollars is charged to those taking the degree of Master of Laws. These fees must be paid before the degrees are conferred or certificate delivered.

Special students are required to arrange their fees satisfactorily with the Dean or Secretary before being admitted.

OTHER EXPENSES

There are two dormitories on the University grounds for the use of students. Each occupant is charged by the University a rent of a dollar and a half a term.

The South Dormitory affords unfurnished rooms to such students as desire to board themselves, and thus to reduce their expenses to a minimum. The expense of living in this way is about two dollars per week. Applications for rooms should be made to the President of the University.

The North Dormitory will accommodate more than sixty students. Board, furnished rooms, fuel, light and washing are, at present prices, supplied for about three dollars and twenty-five cents a week. Students will be admitted on special recommendation to the President of the University.

Boarding clubs are also formed in the neighborhood of the University. Furnished rooms are rented at seventy-five cents to one dollar a week for each student, and the cost of table board is two dollars to three dollars a week.

Board with furnished rooms can be obtained in private families, within convenient distances of the University, at rates varying from three and a half dollars to five dollars a week. The ruling rate may be taken as four dollars.

The uniform with which the members of the battalion are required to provide themselves costs (without overcoat), about fourteen dollars. It is quiet in pattern, and is designed to be worn daily in place of civilian dress.

The expenses of a student in the University for a year may be estimated as follows, excluding clothing (except uniform) and traveling expenses:

	Low	Average	High
Incidental fees	$18 00	$18 00	$18 00
Laboratory fees	15 00	20 00	54 00
Books and stationery	15 00	25 00	40 00
Room	4 50	37 00	75 00
Furniture	10 00	.....	.....
Board	70 00	110 00	150 00
Uniform	14 00	14 00	14 00
	$146 50	$224 00	$351 00

The second and third estimates for room include light, fuel and care. The third estimate is for room occupied by a single student. The requirements for laboratory fees and books depend upon the course of study pursued.

SELF-SUPPORT.

There is a large amount of work upon the University farm which is assigned to students, preference being given to those who are studying Agriculture. *But the University cannot promise work to all applicants.* Many students find work in private families, in offices, and in various occupations, by means of which they defray at least a portion of their expenses. A person of ability and energy, who is master of a trade, or who can do good work of any kind, can generally find remunerative employment. It has seldom been known that any student of ordinary energy and industry was obliged to leave the University because of lack of money for necessary expenses, *after having been say sixty days on the grounds* or long enough to inform himself as to the opportunities for securing employment.

Students should distinctly understand that where they attempt entire or partial self-support they should lengthen the term of study. An employment bureau is maintained at the University where the names of those seeking work and of those desiring workers are recorded. Students should report to the Executive Office from time to time as to their needs and their work. This will enable the authorities to be more helpful than otherwise would be possible.

PRIZES.

Through the generosity of Hon. William J. Bryan an annual prize of fifteen dollars is offered for the best essay on the principles underlying the form of government of the United States. Competition for this prize is open to all students of the University.

The Edward Thompson Company offer annually to the student writing the best essay on a legal theme selected by the Faculty of the College of Law, the second edition of the English and American Encyclopedia of Law, which includes about thirty volumes.

Other prizes are offered in special departments, for which see department circulars or the heads of the departments.

GENERAL RULES FOR STUDENTS.

Rule 1. Each student shall at the beginning of the year give, in writing, his or her local address to the President, and shall promptly report all subsequent changes of address.

Rule 53. Smoking is prohibited in the halls, basement, and lecture rooms of the University buildings.

Rule 56. The rooms of University student organizations which are located in the University buildings shall not be used for the purposes other than the usual exercises of such organization without the previously obtained consent of the General Faculty.

Rule 57. No arangements or announcements shall be made by students for any public gathering or exercises in the University buildings without the previously obtained consent of the President.

Rule 66. All absences of individual students from the city, for any purpose, involving absence from college exercises, must be accounted for to the President; and in all possible cases permission must be previously obtained.

Rule 86. All students are required to register on the first day of each term or semester.

Rule 88. In the case of former students, if the incidental fee is not paid until the second day of the term or semester, one dollar will be added, and for each succeeding day of delinquency fifty cents will be added.

Rule 89. The assignment of work shall be made and recorded for each student, as shall be determined by the several faculties; but at the beginning of each term or semester, each student's card shall be signed by the Secretary of his College before presentation to the Bursar.

THE COLLEGES

THE COLLEGES

ADMISSION

The University is open on equal terms to both sexes.

The entrance examinations for 1902 will be held on Monday and Tuesday, June 16 and 17, and on Monday and Tuesday, September 22 and 23. A part of the examinations may be taken in June and the remainder in September. Conditions incurred at the June examinations must be removed at the September examinations.

Applicants for admission to the Colleges of Agriculture, of Arts, Philosophy, and Science, or of Pharmacy, must be at least sixteen years of age; for admission to the College of Engineering or of Veterinary Medicine must be at least seventeen years of age; for admission to the College of Law must be at least eighteen years of age. Each must be provided with credentials of scholarship from his last instructor or from the last institution with which he has been connected, and with a certificate of good moral character.

There are three modes of admission to the University:

1. Certificates of the preparatory departments of Colleges of approved standing and of Normal schools in Ohio are accepted, if found satisfactory, in lieu of examination for preparatory studies, under the following conditions:

Each certificate must contain a detailed statement of the studies pursued, the text books used, the amount of work done in each study, the amount of time devoted to it, the date of the examination, and the applicant's rank or standing in it. A copy of the course of study should accompany the certificate; and both should be sent to the University not later than the first of September, *The University cannot promise this recognition to those certificates presented during entrance week.*

Blank certificates will be furnished on application.

Applicants for admission who come from other Colleges or Universities are required to bring certificates of honorable dismissal.

Teachers' certificates (in force) will be accepted at their face value.

2. From time to time the University approves the courses of study in certain High Schools of the State; and the graduates of these High Schools are admitted on diplomas and certificates in accordance with the following rules:

Rule 94. Such diplomas and certificates shall be accepted in lieu of examination for preparatory studies only under the following conditions:

(a) The certificates must state in detail the studies pursued, the text-books used, the amount of work done in each study, the amount of time devoted to it, and the fact that he has successfully passed in the work.

(b) The certificate will be accepted for such studies only, or such part of each, as it shall show to have been satisfactorily accomplished.

(c) Every such certificate must be accompanied with a diploma showing that the candidate has completed the course of study in the school from which he comes. But the General Faculty may except from this condition schools whose work is known to be exceptionally good, provided that the candidate has attended the school two full years.

(*d*) Upon the request of the authorities in charge of any high school, academy, or normal school in Ohio, for the inspection of the school under their control,

the President shall appoint one or two members of the Faculty to visit such school, who shall thoroughly inspect the school to ascertain whether its graduates may be reasonably supposed to possess the necessary qualifications for admission to the University. After such inspection the inspector or inspectors shall report their conclusions in writing with the reasons therefor to the President, who, with four professors to be annually elected by the Faculty shall constitute a Standing Committee to consider whether the graduates of the school should be admitted without examination; such privilege, if granted, not to extend beyond the period of three years, without re-examination of the school. This committee shall from time to time report to the Faculty the names of such schools as in their judgment should be added to the list of accredited schools, or should be withdrawn from that list.

(*e*) Whenever, after a sufficient trial, it becomes evident that the graduates of any school are not adequately prepared, the diploma and certificate of such school will no longer be accepted.

95. No applicants for admission to the University will be accepted who are deficient or conditioned in required entrance work representing in the aggregate more than three units. Provided that in any college entrance conditions may be made up (1) by examination, conducted only by the proper officers of this institution, in the subject or subjects in which the conditions are incurred; or (2) by the substitution of excess work in other approved subjects; or (3) by the substitution of other work of equivalent amount to be done in the University at such times and in such subjects as the Faculty of that college shall direct.

3. All other applicants are subject to examination on the groups of study mentioned below under the headings of those Colleges and Courses in the University which they desire to enter.

Full equivalents for the text-books named will be accepted.

ADMISSION TO SPECIAL STUDIES.

Rule 96. Students who desire to pursue special lines of work in the University, and do not desire to become candidates for degrees, will be admitted on the following conditions:

(*a*) The regular entrance examinations must be satisfied.

(*b*) But applicants who are not less than twenty-one years of age, after obtaining credit for the common English branches, may be excused from examination in such studies as may be deemed best by the Executive Committee of the appropriate college; provided, that if any such student afterwards becomes a candidate for a degree he shall pass the omitted examinations at least two years before a degree can be conferred.

Rule 97. Students desiring to pursue special lines of work in the University shall, upon admission, lay before the Executive Committee of the appropriate college for approval or modification, a written statement of the end they have in view, the studies proposed for the attainment of that end, and the probable period of residence at the University. Such students shall be held as regularly to their accepted schemes of work as are regular undergraduates to their prescribed courses of study. Admission will be refused to, or withdrawn from, all of whose definiteness of purpose the Executive Committee fail to receive satisfactory evidence. But all preparatory requirements at the time of their admission must be satisfied at least one academic year before their graduation. (See Rule below.)

ADMISSION TO ADVANCED STANDING.

Rule 98. Applicants for advanced standing who do not come from some other university or college will be examined in the studies preparatory to admis-

sion to the appropriate college, and also in such undergraduate studies as they may wish to be credited with in advance. Applicants who have completed at least one year's work in an approved college, and who bring explicit and official certificates describing their courses of study and scholarship, and letters of honorable dismissal, will be admitted without examination, except such as may be necessary in order to determine what credit they are to receive for work done in the college from which they have come, and what courses of study they may with profit pursue in the University.

GRADUATION.

Rule 99. No one will be admitted to candidacy for a degree at any Commencement who has not done the last year of work required for the degree in residence at the University, and no student will be registered in such candidacy later than the first day of October.

Rule 128. Except by unanimous consent of the Faculty, no candidate for graduation will be recommended for a degree whose record is not in all respects complete by the Friday evening previous to the Commencement Day at which he seeks the degree; and all students shall be notified of this rule at the beginning of their graduation year, and the rule (except the last clause) shall be printed in the annual catalogue. (See Rule 33.)

Rule 137. No candidate for graduation, whose course requires a thesis, will be permitted to register for the second term or semester of his graduating year except upon presentation to the Bursar, of the President's certificate that his thesis subject has been announced and approved.

XI. EXAMINATIONS AND STANDING.

Rule 111. Students shall be regarded as strictly on trial until they have removed all deficiencies and conditions in entrance requirements.

Rule 112. Students who have any entrance conditions outstanding at the beginning of third year of residence at the University will not be allowed to register until such conditions have been removed.

Rule 116. The standing of students in each study shall be reported at the end of each term or semester, as "merit," "passed," "conditioned," or "failed." This standing shall be determined by the head of each department by such means and methods as he may choose, but no student shall be reported "failed" without having had the opportunity of a written examination.

Rule 117. The standings "merit" and "passed" indicate that the student has full credit for the term's or semester's work in the study in which this standing is obained.

Rule 118. The report "credit" (K) shall be used only for work not done in regular class at the University.

Rule 119. The standing "conditioned" indicates that credit for the term's or semester's work in the study in which the condition was incurred is withheld. The student shall be given an opportunity to obtain credit by a special re-examination; or, if the study be a continuous one, the instructor in charge may, at his discretion, excuse the student from re-examination, and may allow him to obtain credit by pursuing the study successfully during the following term or semester. If the student thus excused from re-examination does not pass upon the work of the second term or semester, he shall be reported as "failed" in the work of both terms or semesters. Any condition that is not removed within one year from the beginning of the term or semester in which it was incurred shall lapse into a "failure."

Rule 120. The standing "failed" indicates that the student has obtained no credit whatever for the term's or semester's work in which the mark is given. The student must, at the first opportunity, repeat in class the study in which he has failed. But a student who has failed in an elective study may be excused from repeating such study by the Executive Committee of his college. In case of failure in any continuous study the work of the term or semester in which the failure is incurred must be repeated in class before any subsequent term's or semester's work in that study can be commenced. Unexcused absence from any regular examination is construed as a failure therein.

Rule 121. Any student who fails at the end of any term or semester to secure full credit for two-thirds of his work shall be put on probation for the following term or semester with restricted work, and, if similarly delinquent in his studies at any time within the next ten academic months, shall thereby cease to be a member of the University.

Rule 122. If, for any cause, the preparation, progress or success of any student in the work assigned him be found unsatisfactory, the President may remove him from a class or dismiss him from the University.

GRADUATE WORK

Graduates of this or other institutions may, on application to the Faculty, enter the University and pursue such lines of work as may be arranged or approved by the appropriate collegiate committee. Such graduate students are subject to all the ordinary regulations (as to fees, attendance, etc.), prescribed for undergraduates.

IN THE COLLEGES OF AGRICULTURE AND DOMESTIC SCIENCE, ENGINEERING, LAW AND PHARMACY

Masters degrees are conferred upon graduates in Agriculture, Horticulture and Forestry, Engineering, Law and Pharmacy at the end of not less than one year's residence, which shall be wholly devoted to the completion of an approved course of study in the University. Each is required in addition to present an acceptable thesis upon some subject connected with his course of study.

IN THE COLLEGE OF ARTS, PHILOSOPHY AND SCIENCE

(a) ADMISSION

1. Registration as a graduate student of the College of Arts, Philosophy and Science is open to all graduates of this College, and to graduates of other colleges of this University, or of other universities or colleges who satisfy the Graduate Committee that they are qualified to pursue with profit the work here offered in the lines of study which they wish to carry on.

2. Graduates of institutions of which the undergraduate courses of study are not substantially equivalent to the course prescribed in this college for the bachelor's degree will be required to do an additional amount of undegraduate work, or to prolong their term of residence, before being admitted to full candidacy for a higher degree.

3. Bachelors of this College or of other institutions who do not wish to become candidates for a higher degree may be admitted as special graduate students.

(b) GRADUATE COURSE OF INSTRUCTION

1. Any course of instruction offered in the College of Arts, Philosophy and Science is open for election by graduate students who satisfy the head of the department that they are qualified to pursue it with profit.

2. The work of candidates for higher degrees is not confined to the courses of instruction regularly offered in the College. Each student chooses a major study and one or two minor studies, which must be approved by the Graduate Committee before he enters upon his work. This may consist of attendance upon specified courses or of private research or reading and report thereon. The professors in charge of the studies chosen constitute a special committee, the professor in charge of the major study being the chairman, to supervise the work of the student. Upon the completion of the prescribed course a final examination upon the entire work undertaken for the degree is held under the direction of the special committee, except that at the option of the committee the examination upon the minor or minors may be held whenever such minor or minors are completed.

A thesis upon some subject within the field of the major study is required of all candidates for the doctor's degree; and is also required of all candidates for the master's degree unless waived in individual cases by the Graduate Committee on the recommendation of the special committee in charge of the candidate's work.

(c) REQUIREMENTS FOR HIGHER DEGREES

1. The degree of Master of Arts is open to those holding the Bachelor's degree who have been admitted to full candidacy as indicated above (see Admission, second paragraph). A residence of at least one year at this University wholly devoted to the work for the degree is required. With the consent of the committee the work of candidates for the Master's degree may be distributed over more than one year.

2. A holder of the Bachelor's degree will be recommended for the degree of Master of Arts upon the completion of the prescribed term of residence, and passing a final examination in the course of study laid out for him, covering a major and one or two minor subjects approved by the Graduate Committee, and the submission and acceptance of a thesis on some subject within the field of the major study. The major study must be in advanced work; the minor study may, with the approval of the Graduate Committee, be of a more elementary character.

3. The subject for the Master's thesis must be chosen and approved by December 1st, and the completed thesis must be submitted not later than June 1st. A typewritten copy of the accepted thesis must be deposited with the University before the candidate will be recommended for a degree.

4. The degree of Doctor of Philosophy is open to those holding the Bachelor's degree who have been admitted to full candidacy as indicated above (see Admission, second paragraph), and who also fulfill the terms of this and the next paragraph (4 and 5). At least three years of resident graduate work is required, but on approval of the Graduate Committee the first year or the first two years may be spent at another university which offers equivalent graduate work.

5. Save in the cases of persons who come properly accredited from a graduate school of some other university no student will be enrolled as a candidate for the degree of Doctor of Philosophy until he has been in residence as a graduate student at this University for one year. Formal application for enrollment as a candidate for the degree must be made at least one year before the candidate expects to present himself for final examination. No person will be admitted to candidacy for the degree who does not possess at the time of enrollment a reading knowledge of French and German.

6. Each candidate for the Doctor's degree must pursue a major study and two allied minor studies, one of which may be within the same department as the major. All of them must be advanced, specialized work.

7. Each candidate will also be required to prepare a thesis within the field of his major study, involving an extended research or investigation and constituting an original contribution to knowledge.

8. After the acceptance of the thesis the candidate will be examined upon the entire work undertaken for the degree, except that at the option of the candidate's special committee the examination on the minors may be held whenever such minors are completed.

9. Each candidate is required to have his accepted thesis printed and to deposit with the University library fifty copies to be used for exchange purposes.

10. The subject of the thesis for the Doctor's degree must be chosen and approved by the special committee by November 1st of the college year in which the applicant expects to take the degree. The completed thesis must be submitted not later than May 1st. The final examination will be held not later than June 1st.

FELLOWSHIPS

To encourage graduates of this University, and of other similar and approved institutions in this State, to continue their studies and to undertake advanced work leading to the higher degrees, the University authorities have established fellowships in several departments. These demand about one-half of the time of the fellow for laboratory or other similar assistance — as far as possible along the line of his graduate study. The remainder of his time is given to graduate work. The fellowships pay from $250 to $300 for the University year. At present there are three such fellowships in Chemistry and in Rhetoric, two in Botany, and one each in Economics, Mathematics and Zoology, and a few others in the technical and professional colleges.

There are also two fellowships endowed by Mr. Emerson McMillin, of New York, known as the Emerson McMillin Fellowship in Astronomy, and the Emerson McMillin Fellowship in Economics. The former has an annual value of $300, the latter of $250. These differ from the University fellowships in that the holder is not required to render assistance in the department, and is expected to devote his entire time to graduate study. Appointments to all fellowships are made annually in April or May for the following year on recommendation of the head of the department.

THE COLLEGE OF AGRICULTURE AND DOMESTIC SCIENCE

The College of Agriculture and Domestic Science offers six distinct courses of study:

1. *A four years' Course in Agriculture.*
2. *A four years' Course in Horticulture and Forestry.*
3. *A two years' Course in Agriculture and Horticulture.*
4. *A winter term's Course in Dairying.*
5. *A four years' Course in Domestic Science.*
6. *A two years' Course in Domestic Science.*

REQUIREMENTS FOR ADMISSION TO THE FOUR-YEAR COURSES.

The following are the requirements:

1. *Arithmetic, Descriptive and Physical Geography, English Grammar and United States History.* Physical Geography, one unit; United States History, one unit.

2. *English Composition and English Classics.*—Each applicant will be tested as to his ability to write clear and correct English. The test will be the writing of several brief essays, of which one will be upon a subject drawn from the applicant's observation or experience, and the others upon topics requiring a knowledge of the following books, *or equivalents*: Shakespeare's *Merchant of Venice, Julius Caesar, and Macbeth;* Milton's *Lycidas, Comus, L'Allegro* and *Il Penseroso;* Burke's *Conciliation with the Colonies;* Macaulay's *Essays on Milton and Addison;* The Sir Roger de Covery Papers in *The Spectator;* Goldsmith's *The Vicar of Wakefield;* Coleridge's *The Ancient Mariner;* Scott's *Ivanhoe;* Carlyle's *Essay on Burns;* Tennyson's *The Princess;* Lowell's *The Vision of Sir Launfal;* George Eliot's *Silas Marner.* English composition and Rhetoric, two units; English Classies, one unit.[1]

3. *Algebra*—Taylor's Academic or equivalent. Two units.

4. *Plane Geometry*—Venable, Wentworth, White or Wells, or equivalent. One unit.

5. *Botany*—Gray or Kellerman's Botany or Flora, or equivalent. One unit.

6. *Physics*—Gage, Carhart and Chute, Avery or Appleton, or equivalent. Two units.

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[1]To meet the English requirement the schools should provide courses in composition-practice and courses in English classics extending side by side through the preparatory years.

In the courses in composition, pupils should be afforded regular and abundant practice in preparing narrative, descriptive, expository and argumentative themes, and should be familiarized with those principles of Rhetoric which are most helpful in composition, such as the principles of sentence-structure, outlining, paragraphing, and choice of words. Scott and Denney's Composition-Rhetoric is recommended as a guide. The study of specimens of bad English from a text-book is not recommended; in order to insure accuracy, a considerable amount of written work of the pupils should be corrected by the teacher and revised and rewritten by the pupils themselves. Some of the composition-work may be based upon the reading prescribed above, but much of it should be based upon the observation and experience of the pupils.

In the course in English classics, pupils should read the prescribed books with sufficient care to become familiar with the plot, incidents, and characters of all of them and should also learn something of their authors and of their places in literary history. A few of these books, or portions of all of them, should be examined closely with reference to form, structure, method, language, and leading characteristics of style. The voluntary outside reading of additional books should be encouraged by the teacher. In connection with all of the reading it is recommended that the memorizing of notable passages of prose and poetry be required.

7. *Civil Government*—Fiske or Thorpe preferred. One unit.

8. *History*—Myers's *General History*, or equivalent. One unit.

9. *Latin*—Pronunciation (the Roman method); Grammar (an exact knowledge of the inflections is essential); Caesar, the first four books of the *De Bello Gallico*. Three units.

Or French—The whole subject of French Grammar. Applicants will be expected to read at sight easy French and to translate correctly into French simple English sentences. Two years ought to be given to this study, the first year being spent mainly on the grammar with easy reading; the second devoted to reading good modern French, with grammatical analysis and exercises in writing. The texts read should be chiefly narrative and conversational prose; one or more prose comedies of the nineteenth (not the seventeenth) century should be included. Three units.

Or German—Joynes-Meissner's or Thomas' Grammar is recommended. The essentials in these grammars should have been mastered thoroughly, i. e., declensions of nouns and adjectives, pronouns, comparison of adjectives, prepositions, regular and irregular verbs and essentials of syntax.

The following books or their equivalent must have been read (not less than 300 pages).

Joynes' or Whitney's Reader, Hillern, Höher als die Kirche, Riehl, Der Fluch der Schönheit, Freytag, Die Verlorene Handschrift, Gerstäcker Irrfahrten. Three units.

For the present, the *German or French* required for admission may be begun at the University, but without University credits. A student may enter with conditions, amounting to three units, not counting German or French.

Algebra, Plane Geometry, Botany, Physics and Physical Geography are taught as a part of the Short Course in Agriculture. Students may prepare in these subjects for entrance to the four year courses by entering the Short Course in Agriculture.

TO SPECIAL STUDIES
(See page 64.)

TO ADVANCED STANDING
(See page 64.)

TO GRADUATE WORK.
(See page 66.)

REGISTRATION

All students are required to register and pay their term fees on or before the first day of each term, between the hours of 8:00 a. m. and 12 m., or between 1:00 and 4:00 p. m., central standard time.

Former students who fail to register as above will be charged one dollar in addition to the usual incidental fee, for the first day of delinquency, and fifty cents additional for each subsequent day.

No candidate for graduation will be permitted to register for the second term of his graduating year, except upon presentation to the Bursar, of the President's certificate that his thesis subject has been announced and approved.

AMOUNT OF WORK

No student is permitted to take less than fifteen credit hours a week of any sort of work, except by special permission, and no student will be permitted to

take more than the regular work of the class to which he belongs, who has not passed all his work for the preceding term. A credit hour means one hour class room work in lecture, recitation or quiz, or two hours of laboratory work.

ELECTIVE STUDIES

All elections of work in continuous studies, when once made, are understood to be made for the entire collegiate year.

The right is reserved to each professor to withdraw the offer of any elective study when it is not chosen by at least four persons.

STANDING

At the close of any term a student failing to pass in two-thirds of his work will be considered on probation; and a second similar failure will forfeit his connection with the University.

THESIS

As a requisite for graduation, each candidate must present an acceptable thesis, embodying the results of a special study. The subject of this study must lie within the field of the degree sought. The subject must be announced to the President of the University (dependent upon the approval of the head of the Department), not later than December 14th of the fourth year; and the completed thesis must be presented in duplicate, on standard paper of certain size and quality, typewritten, bound, and titled, not later than the second Saturday before Commencement Day.

DEGREES

The degree of Bachelor of Science in Agriculture is conferred on students who have completed the Course in Agriculture; that of Bachelor of Science in Horticulture and Forestry upon those who have completed the Course in Horticulture and Forestry; and that of Bachelor of Science in Domestic Science upon those who have completed the Course in Domestic Science. Master's degrees are conferred upon graduates of these courses at the end of not less than one year's residence, which shall be wholly devoted to the completion of an approved course of study in the University. Each candidate is required in addition to present an acceptable thesis upon some subject connected with his course of study.

FEES

Incidental Fee. Each student is required to pay an incidental fee of six dollars per term.

The gymnasium is free to all students but those desiring a locker will be charged a fee of one dollar a term.

All term dues must be paid at the opening of each term as a condition of admission to classes.

A fee of five dollars to cover expenses of graduation, diplomas, etc., is required of each person receiving one of the ordinary degrees from the University, and this fee must be paid before the degree is conferred.

FREE SCHOLARSHIPS

A free scholarship good for two years is granted to one student annually from each county in Ohio. If in any county there is no applicant for the free scholarship in the College of Agriculture and Domestic Science, then a free scholarship, good for two years in the College of Veterinary Medicine, may be granted. Each scholarship is valid two years from its grantal and covers the incidental fee, but the person appointed to receive its benefits is subject to all

the conditions prescribed for admission to the course. Students taking laboratory work are required to make a deposit to cover materials broken or used up, the same as other students. The free scholarship can not be used in the special winter term course in dairying. The appointments are made by the County Boards of Agriculture, and are not transferable by the appointees. To learn whether the scholarship of a given county for the current year has been granted, inquiry should be addressed to the Secretary or President of the County Agricultural Society.

For further information concerning these scholarships, inquiries should be addressed to the Dean of this College.

SELF-SUPPORT

There is a large amount of work on the University farm and campus and in the garden, orchard and greenhouses, which can be done by students, and for which they are paid at current rates for such labor. By this means, together with what can be earned by steady labor during the summer vacations, a considerable number of students defray all their expenses.

Preference is given to students who are willing to devote a certain number of hours each day to the work assigned.

Work can not be promised to all applicants, and is not guaranteed to any...

Applications for employment should be made to Frank Ruhlen, Instructor in Zootechny. Labor blanks will be furnished upon request.

OUTLINE OF THE COURSE IN AGRICULTURE

A careful examination of the course as here outlined will show that about one-third of the time of the student during the four years is or may be devoted to Language, (English and foreign), History and Economics, about one-third to pure science, and one-third to technical or professional training. Electives in the senior year allow the student, if he chooses, to specialize in Zootechny (Animal Husbandry), Agronomy (Plant production or field agriculture), Dairying, or Agricultural Chemistry.

The Course in Agriculture leads to the degree of Bachelor of Science in Agriculture.

NOTE — The figure in parenthesis following the name of each study indicates the number of that study in its department. A full description of department work follows this statement of Courses.

FIRST YEAR

REQUIRED.

First Term.	Credit hours	Second Term.	Credit hours	Third Term.	Credit hours
Agr'l Chemistry (1) Principles.	4½.	Agr'l Chemistry (8) Organic.	4½.	Agr'l Chemistry (9) Applications.	6.
Botany (6) Physiological.	4½.	Botany (7) Economic.	4½.	Botany (8) Vegetable Pathology.	6.
Shopwork (2)	3.	Shopwork (1)	3.		
Rhetoric (1) and (21) English Composition.	2½.	Rhetoric (1) and (21) English Composition.	2½.	Rhetoric (1) and (21) English Composition.	2½.
Zoology (1) Invertebrate.	3½.	Zoology (1) Invertebrate.	3½.	Zoology (1) Vertebrate.	3½.
Cadet Service.*		Gymnasium.		Cadet Service.	

* A rule of the Board of Trustees requires each male student (except students in the College of Law) to render two years' Cadet service as a condition of graduation. Students physically incapacitated for Cadet Service will be assigned an equivalent in special gymnasium work. The President has authority to excuse from cadet service under certain conditions.

Young women are required to carry Hygiene and Physical Training in place of cadet service.

SECOND YEAR

REQUIRED

First Term.	Credit hours	Second Term.	Credit hours	Third Term.	Credit hours
Agriculture (28) Breeds of Live Stock.	4½.	Agriculture (29) Breeds of Live Stock.	4½.	Agriculture (30) Principles of Breeding.	4½.
Agr'l Chemistry (4) Laboratory.	5.	Agr'l Chemistry (4) Laboratory.	5.	Agr'l Chemistry (4) Laboratory.	5.
Horticulture (1) Elements.	4½.	°Shopwork (2)	3.	Horticulture (3) Plant Propagation.	4½.
Physiology (1) Anatomy.	3.	Physiology (1) Physiology.	3.	Physiology (1) Physiology.	3.
Zoology (4) Economic Entomology.	2½.	Zoology (4) Economic Entomology.	2½.	Zoology (4) Economic Entomology.	2½.
Cadet Service.		Gymnasium.		Cadet Service.	

THIRD YEAR

REQUIRED

Agriculture (11) Farm Equipment.	4½.	Agriculture (12) Soils.	4½.	Agriculture (13) Crops.	4½.
				Drawing (16)	3.
Geology (2) General.	5.	Geology (5) Economic.	3½.	Astronomy (3) Meteorology.	2.
Vet. Medicine (28) Anatomy.	4½.	Vet. Medicine (29) General Pathology.	4½.	Vet. Medicine (30) Special Pathology.	4½.
†French (1) Elementary. †German (1) Elementary. or Spanish (1) Elementary.	4.	French (1) Elementary. German (1) Elementary. or Spanish (1) Elementary.	4.	French (1) Elementary. German (1) Elementary. or Spanish (1) Elementary.	4.

FOURTH YEAR

REQUIRED

American History (1) U. S. Political. or Economics (1) Political Economy	3.	American History (1) U. S. Political. or Economics (1) Political Economy	3.	American History (1) U. S. Political. or Economics (1) Political Economy	3.
Thesis	2.	Thesis	2.	Thesis	2.

Eight hours per week through the year; chosen from any of the following courses:

‡Agriculture (14) Animal Mechanics.	4½.	§Agriculture (26) Zootechny.	3½.	Agriculture (16) Rural Economics.	4.
Agriculture (19) Agronomy.	4.	Agriculture (20) Agronomy.	4.	Agriculture (21) Rural Engineering.	4.
Agriculture (22) Dairying.	4.	Agriculture (15) Dairying.	4.	Agriculture (25) Dairying.	4.
*Agr'l Chemistry (6) Laboratory.	4.	Agr'l Chemistry (6) Laboratory.	4.	Agr'l Chemistry (6) Laboratory.	4.
Vet. Medicine (24)	3.	Vet. Medicine (18)	3.	Vet. Medicine (18)	3.

† Where credit is received for Elementary French or German, French (2) 4 hours or German (4) 4 hours is required.

° After 1902-1903, Drawing (10) 3.

‡ After 1902-1903, Agriculture (31) 4.

* In case a student intends to elect Agricultural Chemistry (6) 4, and Agriculture (19), (20), and (21) 4, he may elect Agricultural Chemistry 5 hours in place of Veterinary Medicine (28), (29), and (30) 4½.

§ After 1902-1903, Agriculture (32) 4.

ELECTIVE

Four hours a week through the year chosen from any of the courses given in any of the Colleges of the University upon which the student is qualified to enter, except the College of Law.

THESIS

At the beginning of the fourth year, each student in this Course shall take up as thesis work some special line of inquiry within the field of the degree sought. The subject, together with a written approval of it by the head of the department within which it lies, must be submitted to the President of the University, not later than the fifttenth day of December of the fourth year. The completed thesis must be submitted not later than the second Saturday before Commencement Day.

OUTLINE OF THE COURSE IN HORTICULTURE AND FORESTRY

This course was established to meet a growing demand for special training in Horticulture and Forestry. It seeks to ground the student in those sciences that are fundamental, and to give a thorough drill in all methods of plant propagation and the more technical branches of horticulture and forestry.

The course leads to the degree of Bachelor of Science in Horticulture and Forestry.

NOTE — The figure in parenthesis following the name of each study indicates the number of that study in its department. A full description of department work follows this statement of Courses.

FIRST YEAR

REQUIRED

Agr'l Chemistry (1) Principles.	4½.	Agr'l Chemistry (8) Organic.	4½.	Agr'l Chemistry (9) Applications.	6.
Botany (6) Physiological.	4½.	Botany (7) Economic.	4½.	Botany (8) Vegetable Pathology.	6.
Rhetoric (1) and (21) English Composition.	2½.	Rhetoric (1) and (21) English Composition.	2½.	Rhetoric (1) and (21) English Composition.	2½.
Shopwork (2)	3.	Shopwork (1)	3.		
Zoology (1) Invertebrate.	3½.	Zoology (1) Invertebrate.	3½.	Zoology (1) Vertebrate.	3½.
Cadet Service.		Gymnasium		Cadet Service.	

SECOND YEAR

REQUIRED

First Term.	hours	Second Term.	hours	Third Term	hours
Horticulture (1) Elements.	4½.	†Shopwork (2)	3.	Horticulture (3) Plant Propagation.	4½.
Agr'l Chemistry (4) Laboratory.	5.	Agr'l Chemistry (4) Laboratory.	5.	Agr'l Chemistry (4) Laboratory.	5.
Physiology (1) Anatomy.	3.	Physiology (1) Physiology.	3.	Physiology (1) Physiology.	3.
Zoology (4) Economic Entomology.	2½.	Zoology (4) Economic Entomology.	2½.	Zoology (4) Economic Entomology.	2½.
*French (1) Elementary. *German (1) Elementary. or Spanish (1) Elementary.	4.	French (1) Elementary. German (1) Elementary. or Spanish (1) Elementary	4.	French (1) Elementary. German (1) Elementary. or Spanish (1) Elementary.	4.
Cadet Service.		Gymnasium.		Cadet Service.	

THIRD YEAR

REQUIRED

Horticulture (5) Varieties of Fruit.	4½.	Horticulture (6) Principles of Fruit Culture.	4½.	Horticulture (7) Small Fruits and Spraying.	4½.
Agriculture (11) Farm Equipment.	4½.	Agriculture (12) Soils.	4½.	Agriculture (13) Crops.	4½.
				Astronomy (3) Meterology.	2.
				Drawing (16)	3.
Geology (2) General.	5.	Geology (5) Economic.	3½.	Zoology (3) Economic Entomology.	2½.
French (2) or German (4)	4.	French (2) or German (4)	4.	French (2) or German (4)	4.

FOURTH YEAR

REQUIRED

Horticulture (8) Elements of Floriculture.	2½.	Horticulture (9) Com. Floriculture.	2½.	Horticulture (10) Home Floriculture.	2½.
Horticulture (11) Arboriculture.	2½.	Horticulture (12) Forestry and Sylviculture.	2½.	Horticulture (13) Landscape Gardening.	2½.
American History (1) U. S. Political. or Economics (1) Political Economy	3.	American History (1) U. S. Political. or Economics (1) Political Economy.	3.	American History (1) U. S. Political. or Economics (1) Political Economy.	3.
Thesis	2.	Thesis.	2.	Thesis.	2.

ELECTIVE

Eight hours a week through the year chosen from any of the courses given in any College of the University upon which the student is qualified to enter, except the College of Law.

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* Where credit is received for Elementary French or German, French (2) 4 or German (4) 4 is required.

† After 1902-1903, Drawing (10) 3.

OUTLINE OF THE COURSE IN DOMESTIC SCIENCE

The studies pursued in the Department of Domestic Economy, while closely affiliated, naturally group themselves first about the sciences and later about the arts, and for convenience, such work as that with Food Economics, Dietetics, history and manufacture of food, Sanitation and Hygiene, which directly makes demands along scientific lines, is classed as Domestic Science, and the work made possible by the wise acceptance of scientific laws, and by a general knowledge of the culture of past ages; that is, the work of developing beautiful and harmonious surroundings, is classed as Domestic Art.

The college offers two courses in this work: A two years' course planned for those who can give but a limited time to University training, and a four years' course, requiring a fore advanced standing for entrance and leading to the degree of Bachelor of Science in Domestic Science. The outline of the four years' course follows:

NOTE — The figure in parenthesis following the name of each study indicates the number of that study in its department. A full description of department work follows this statement of Courses.

FIRST YEAR

REQUIRED

First Term.	Credit hours	Second Term.	Credit hours	Third Term.	Credit hours
Agr'l Chemistry (1) Principles.	4½.	Agr'l Chemistry (8) Organic.	4½.	Agr'l Chemistry (9) Applications.	4½.
Botany (12) Physiological.	3½.	Botany (12) Economic.	3½.	Botany (12) Vegetable Pathology.	3½.
Drawing (1)	3.	Drawing (1)	3.	Drawing (1)	3.
Rhetoric (1) and (21) English Composition.	2½.	Rhetoric (1) and (21) English Composition.	2½.	Rhetoric (1) and (21) English Composition.	2½.
Zoology (1) Invertebrate.	3½.	Zoology (1) Invertebrate.	3½.	Zoology (1) Vertebrate.	3½.
Hygiene and Phys. Training.		Hygiene and Phys. Train.		Hygiene and Phys. Training.	

SECOND YEAR

REQUIRED

Agr'l Chemistry (4) Laboratory*	5.	Agr'l Chemistry (4) Laboratory.*	5.	Physiology (3) Chemical Physiology.	3.
				Physiology (10)	2.
Domestic Economy (1)	5.	Domestic Economy (2)	5.	Domestic Economy (3)	5.
Physiology (1)	3.	Physiology (1)	3.	Physiology (1)	3.
†French (1) Elementary. †German (1) Elementary. or Spanish (1) Elementary.	4.	French (1) Elementary. German (1) Elementary. or Spanish (1) Elementary.	4.	French (1) Elementary. German (1) Elementary. or Spanish (1) Elementary.	4.
Hygiene and Phys. Training.		Hygiene and Phys. Train.		Hygiene and Phys. Training.	

* Specific laboratory work will be provided for students in this course, where necessary.

† Where credit is received for elementary French or German, French (2) 4 hours or German (4) 4 hours is required.

THIRD YEAR

REQUIRED

First Term.	hours	Second Term.	hours	Third Term	hours
Domestic Economy (4)	5.	Domestic Economy (5)	5.	Domestic Economy (6)	5.
Drawing (20) Mechanical.	1½.	Drawing (15) Architectural.	1½.	Drawing (15) House Designing.	1½.
French (2) or German (4)	4.	French (2) or German (4)	4.	French (2) or German (4)	4.

Any two of the following studies:

English Literature (1)	3.	English Literature (1)	3.	English Literature (1)	3.
Economics (1) Political Economy.	3.	Economics (1) Political Economy.	3.	Economics (1) Political Economy.	3.
Education (1)	3.	Education (1)	3.	Education (1)	3.
European History (1)	3.	European History (2)	3.	European History (3)	3.
American History (1) U. S. Political.	3.	American History (1) U. S. Political.	3.	American History (1) U. S. Political.	3.

FOURTH YEAR

REQUIRED

Domestic Economy (7)	4.	Domestic Economy (8)	4.	Domestic Economy (9)	4.
Horticulture (8) Elements of Floriculture.	2½.	Horticulture (9) Window Gardening.	2½.	Horticulture (10) Home Floriculture.	2½.
Zoology (5) Entomology.	3.	Domestic Economy (11) Food Economics.	2½.	Domestic Economy (12) Household Sanitation.	2½.
Thesis	2.	Thesis	2.	Thesis	2.

ELECTIVE

Six hours a week through the year chosen from any of the courses given in any College of the University upon which the student is qualified to enter, except in the College of Law.

THE SHORT COURSES

A two-year course in Agriculture and a two-year course in Domestic Economy have been provided for those who have neither the time nor the means to pursue four-year courses. These short courses also enable those who lack the preparation for entering the four-year courses to obtain such preparation. The studies of the first year of the short courses, it will be noticed, nearly prepare the student to enter the first year of the four-year courses. The student having had chemistry in the first year of a short course can finish his preparation for either of the four-year courses during the first year of the latter course, in place of the chemistry required.

At the end of the first year of the Short Course in Agriculture, for example, the student has three strings to his bow. He may finish the second year of the short course by taking the more technical studies from the four-year courses, if lack of time or means demand it; or he may enter either the four-year course in Agriculture or the four-year course in Horticulture and Forestry. The same is practically true of the Short Course in Domestic Science.

The Course in Dairying begins the first Tuesday in January; all other courses begin on Tuesday following the sixteenth of September. Students wishing to take the Course in Dairying should send for special pamphlet entitled "The Dairy School."

These short courses are not to be compared in breadth and thoroughness with the full courses of the University and all students are urged to take or to continue into the full four-year courses wherever possible.

ADMISSION TO THE SHORT COURSE IN AGRICULTURE AND THE COURSE IN DAIRYING

Applicants, unless over twenty-one, must pass an examination in *Arithmetic*, *Geography*, *Grammar* and *United States History* or bring high school or other certificates for those branches. The requirements for English Grammar in the Short Courses may be met by writing a business letter or theme on some practical subject. Applicants who are over twenty-one are admitted without examination.

ADMISSION TO THE SHORT COURSE IN DOMESTIC SCIENCE

The following are the requirements:

1. *Arithmetic, Descriptive and Physical Geography, English Grammar and United States History.*
2. *English* — (*a*) Composition and Rhetoric; (*b*) English Classics.
3. *Algebra.*
4. *Plane Geometry.*
5. *Civil Government.*
6. *General History.*

OUTLINE OF THE SHORT COURSE IN AGRICULTURE

This course is especially desirable for students of rather mature age. The Short Course in Agriculture also enables students who lack the training to enter the four years' course in Agriculture or in Horticulture and Forestry to make up in large part such deficiency. A considerable number of students in these advanced courses have formerly been students of the short course. This course contains as thorough instruction in Agriculture, Animal Industry, Dairying, Horticulture (including Fruit Culture, Vegetable Gardening and Floriculture), and Forestry, Veterinary Medicine, Economic Entomology and the Sciences underlying these subjects as the time will admit. The second year contains optional work so that it is possible for students to specialize in Horticulture, Agriculture or Animal Industry and Dairying.

No degree is given on the completion of the Short Course in Agriculture but a certificate is issued stating fully the work done.

NOTE — The figure in parenthesis following the name of each study indicates the number of that study in its department. A full description of department work follows this statement of Courses.

FIRST YEAR

REQUIRED

First Term.	Credit hours	Second Term.	Credit hours	Third Term.	Credit hours
Agr'l Chemistry (1) Principles.	4½.	Agr'l Chemistry (8) Organic.	4½.	Agr'l Chemistry (9) Applications.	6.
Mathematics (1) Algebra.	5.	Mathematics (3a) Geometry.	5.	Botany (1) Elementary.	5.
Physics (1) Elementary.	5.	Physics (1) Elementary.	5.	Geology (1) Physiography.	5.
Shopwork (2)	3.	Drawing (10) Mechanical.	3.	Physiology (2) General.	3.
Cadet Service.		Gymnasium.		Cadet Service.	

SECOND YEAR

Not less than 15 hours per week through the year; chosen from any of the following courses subject to conditions named under "Departments of Instruction."

First Term.	Credit hours	Second Term.	Credit hours	Third Term.	Credit hours
Agricu.ture (28) Breeds of Live Stock.	4½.	Agriculture (29) Breeds of Live Stock.	4½.	Agriculture (30) Principles of Feeding.	4½.
Agriculture (11) Farm Equipment.	4½.	Agriculture (12) Soils.	4½.	Agriculture (13) Crops.	4½.
Agriculture (22) Dairying.	4.	Agriculture (15) Dairying.	4.	Agriculture (25) Daitying.	4.
Agriculture (31) Feeding.	4.	Agriculture (32) Hygiene and Management.	4.	Agriculture (16) Rural Economics.	4.
Horticulture (1) Elements.	4½.	Horticulture (2) Greenhouse Construction and Management.	4½.	Horticulture (3) Plant Propagation.	4½.
Horticulture (5) Varieties of Fruit.	4½.	Horticulture (6) Principles of Fruit Culture.	4½.	Horticulture (7) Small Fruits and Spraying.	4½.
Vet. Medicine (28) Anatomy.	4½.	Vet. Medicine (29) General Pathology.	4½.	Vet. Medicine (30) Special Pathology.	4½.
		Shopwork (1)	3.	Zoology (7)	3.
		Physiology (6)	2.		
Cadet Service.		Gymnasium.		Cadet Service.	

OUTLINE OF THE COURSE IN DAIRYING.

The Course in Dairying is designed especially for those who are desirous of mastering the art of butter and cheese making or who wish to become fitted for the position of manager or superintendent of a creamery or cheese factory. In this course the greater part of the time is given to the laboratory or dairy room practice. This consists in the testing of milk as to purity and contents of butter fat; the use and care of centrifugal separators and other dairy devices; the making of butter and cheese by the most improved methods; in short, all the essential operations of the creamery, factory and home dairy management are repeatedly performed under the guidance and direction of competent instructors. The laboratory or dairy room practice is supplemented, however, by lectures and recitations upon the subjects of breeding, feeding, selecting and judging of dairy stock; the disease of the cow; the chemistry of milk; the effect of bacteria and other agents upon milk and its products; the care of boilers and engines and similar subjects. Certificates are issued to those completing the Course in Dairying.

Agriculture (5). Dairy Farming.—Three hours each week. Lectures and recitations on breeds, breeding, feeding, selection and judging of dairy stock, equipment and management of dairy farms.

Agriculture (6). Butter and Cheese-making.—Four half days each week. Laboratory practice in running separator, churning, working butter, making cheese, milk testing, etc.

Agriculture (7). Butter and Cheese-making.—Two hours each week. Lectures and recitations and laboratory work.

Agricultural Chemistry (7). Milk Chemistry and Milk Testing.—Four hours each week. Lectures and laboratory practice.

Physiology (6). Bacteria in their relation to Milk, Butter and Cheese.—Two hours each week. Lectures and Laboratory practice.
Veterinary Medicine (17). Diseases of the Cow.—Three hours each week.
Mechanical Engineering (26). Steam Machinery.—One hour each week.

OUTLINE OF THE SHORT COURSE IN DOMESTIC SCIENCE

NOTE — The figure in parenthesis following the name of each study indicates the number of that study in its department. A full description of department work follows this statement of Courses.

FIRST YEAR

REQUIRED

First Term.	Credit hours	Second Term.	Credit hours	Third Term.	Credit hours
Agr'l Chemistry (1) Principles.	4½.	Agr'l Chemistry (8) Organic.	4½.	Agr'l Chemistry (9) Applications.	4½.
Physics (1) Elementary.	5.	Physics (1) Elementary.	5.	Botany (1) Elementary.	5.
French (1) / German (1) / or / Spanish (1)	4.	French (1) / German (1) / or / Spanish (1)	4.	French (1) / German (1) / or / Spanish (1)	4.
Drawing (1)	3.	Drawing (1)	3.	Drawing (1)	3.
Hygiene and Phys. Training.		Hygiene and Phys. Train.			

SECOND YEAR

REQUIRED

Domestic Economy (1)	5.	Domestic Economy (2)	5.	Domestic Economy (3)	5.
Domestic Economy (4)	5.	Domestic Economy (5)	5.	Domestic Economy (6)	5.

ELECTIVE

Not less than seven hours per week chosen from the following courses, subject to the conditions named under "Departments of Instruction."

Drawing (20)	1½.	Drawing (15)	1½.	Drawing (15)	1½.
Botany (12) Physiological.	3½.	Botany (12) Economic.	3½.	Botany (12) Vegetable Pathology.	3½.
Education (1)	3.	Education (1)	3.	Education (1)	3.
English Literature (1)	3.	English Literature (1)	3.	English Literature (1)	3.
Horticulture (8) Elements of Floriculture.	2½.	Horticulture (9) Window Gardening.	2½.	Horticulture (10) Home Floriculture.	2½.
Zoology (1) Invertebrate.	3½.	Zoology (1) Invertebrate.	3½.	Zoology (1) Vertebrate.	3½.
Rhetoric (1) and (21)	2½.	Rhetoric (1) and (21)	2½.	Rhetoric (1) and (21)	2½.
Physiology (1)	3.	Physiology (1)	3.	Physiology (1)	3.
European History (1)	3.	European History (2)	3.	European History (3)	3.
American History (1)	3.	American History (1)	3.	American History (1)	3.

THE GRADUATE SCHOOL OF AGRICULTURE

HISTORICAL

The movement for a graduate summer school of agriculture was inaugurated at the Ohio State University in 1900, when on the recommendation of the President of the University and Dean of the College of Agriculture and Domestic Science, the Board of Trustees took action in favor of the establishment of such a school and made provision for its financial support. The plan for this school was presented to the Association of American Agricultural Colleges and Experiment Stations at its annual convention in November, 1900, when the matter was referred to its Executive Committee. At the convention of 1901, this Committee reported favorably on the plan and recommended that if the success of the first session seemed to justify the continuation of the school it be made a co-operative enterprise under the control of the Association. This action of the Committee was endorsed by the Association.

The Honorable Secretary of Agriculture has also expressed his cordial approval of the movement for the establishment of this school, and, acting on his advice, the Director of the Office of Experiment Stations has consented to act as its Dean, and other officers of the Department will be on its faculty.

INAUGURAL EXERCISES

As the opening of this graduate school will be a new step of progress in agricultural education in the United States, the objects and aims of this enterprise were explained at inaugural exercises which were held Monday, July 7, at 8 p. m., in the Chapel of Ohio State University. Addresses were given by Hon. James Wilson, Secretary of Agriculture; Hon. W. M. Liggett, Dean of the College of Agriculture of the University of Minnesota and President of the Association of American Agricultural Colleges and Experiment Stations; Dr. H. C. White, President of Georgia State College of Agriculture and Mechanic Arts and Member of Executive Committee of A. A. A. C. E. S.; Dr. W. O. Thompson, President of Ohio State University, and Dr. C. A. True, director of the Office of Experiment Stations, and Dean of the Graduate School of Agriculture.

PURPOSE OF THE SCHOOL

The purpose of the graduate school of agriculture is to give advanced instruction in the science of agriculture, and particularly in the methods of investigating agricultural problems and teaching agricultural subjects.

PLACE OF SESSIONS

The sessions of the school were held in Townshend Hall of Ohio State University.

TERM

The school was in session four weeks, from July 7 to August 1, 1902. The school day consisted of three periods of two hours each — 8–10 and 10–12 a. m. and 2–4 p. m., except on Saturdays, when there were exercises in the first two periods only. Facilities for registration were provided on Saturday, July 5, and the exercises of the school began promptly at 8 a. m., Monday, July 7.

REQUIREMENTS FOR ADMISSION

Only persons who have completed a college course and taken a bachelor's degree were admitted to the privileges of the school, except that admission was granted to non-graduates who were recommended by the faculties of the colleges with which they are associated as persons properly qualified to profit by advanced instruction in agriculture. The school was open on equal terms to both sexes.

COURSES OF STUDY

Instruction was given in three main lines — Agronomy, zootechny and dairying. A special course in plant and animal breeding was also given.

The course in agronomy included climatology and soil physics, vegetable physiology, fertilizers and the culture and management of field crops.

The course in zootechny included the principles of animal form, the breeding and nutrition of domestic animals and the application of these principles to the choice and management of beef and dairy cattle, sheep, swine and horses.

The course in dairying included the science of dairying, especially its chemistry and bacteriology, the application of the science in practice, and demonstrations of improved methods of butter and cheese-making.

The course in plant and animal breeding dealt chiefly with methods of investigation and instruction in this subject.

The Saturday morning periods were devoted to general exercises in agricultural pedagogy and lectures on special topics of general interest.

METHODS OF INSTRUCTION

Instruction was given by lectures, seminars, and laboratory demonstrations.

FACILITIES FOR INSTRUCTION

The school had the use of the well appointed lecture rooms, thoroughly equipped laboratories and agricultural library of the college of agriculture of the University. This college is especially well equipped with apparatus in soil physics and dairying. Animals of different kinds and breeds were furnished for demonstration exercises. Lectures were illustrated with natural objects, lantern slides, photographs, charts, etc.

EXPENSES OF THE GRADUATE SCHOOL OF AGRICULTURE

A matriculation fee of six dollars was charged each student for the whole session or any part thereof. This is the fee regularly charged by the Ohio State University for each term. No laboratory fees were charged. Board and room may be obtained in the neighborhood of the University for from five dollars to seven dollars per week. The north dormitory at the Neil avenue entrance to the University grounds has thirty-four rooms. Five dollars a week was charged for board and room — a single occupant to a room. Table board was four dollars per week.

FACULTY OF THE GRADUATE SCHOOL OF AGRICULTURE.

WILLIAM OXLEY THOMPSON, D. D., LL. D., *President.*

ALFRED CHARLES TRUE, PH. D., *Dean.*

THOMAS FORSYTH HUNT, M. S., *Registrar.*

And the instructors named below.

OUTLINE OF THE COURSE IN THE GRADUATE SCHOOL OF AGRICULTURE.

INSTRUCTION IN AGRONOMY

SOIL CLIMATOLOGY. Prof. F. H. King, Chief of Division of Soil Management, Bureau of Soils, U. S. Department of Agriculture.

SOILS. Prof. Milton Whitney, Chief of Bureau of Soils, U. S. Department of Agriculture; Lyman J. Briggs, Ph. D., Soil Physicist, Bureau of Soils, U. S. Department of Agriculture; W. D. Gibbs, M. S., Professor of Agriculture, New Hampshire State College, and Director and Agriculturist of the New Hampshire Agricultural Experiment Station.

FERTILIZERS. E. B. Voorhees, D. S., Professor of Agriculture, New Jersey State College for the Benefit of Agriculture and the Mechanic Arts, and Director of the New Jersey Agricultural Experimen Station; H. J. Wheeler, Ph. D., Professor of Geology, Rhode Island College of Agriculture and Mechanic Arts, and Director and Chemist of the Rhode Island Agricultural Experiment Station.

PRINCIPLES OF PLANT PRODUCTION AND THEIR APPLICATION TO FIELD CROPS. Prof. B. T. Galloway, Chief of Bureau of Plant Industry, U. S. Department of Agriculture.

MAIZE. Cyril G. Hopkins, Ph. D., Professor of Agronomy, College of Agriculture of the University of Illinois, and Agronomist and Chemist of Illinois Agricultural Experiment Station.

COTTON. John F. Duggar, M. S., Professor of Agriculture, Alabama Polytechnic Institute, and Agriculturist of the Alabama Agricultural Experiment Station.

INSTRUCTION IN ZOOTECHNY

NUTRITION OF ANIMALS. H. P. Armsby, Ph. D., Lecturer on Stock Feeding, Pennsylvania State College, and Director of the Pennsylvania Agricultural Experiment Station; W. H. Jordan, D. S., Director of New York State Agricultural Experiment Station.

ANIMAL PRODUCTION AND CONFORMATION. BEEF CATTLE. C. F. Curtis, M. S. Agr., Professor of Agriculture, Iowa State College of Agriculture and Mechanic Arts, and Director of the Iowa Agricultural Experiment Station; H. J. Waters, B. S. A., Dean of the College of Agriculture and Mechanic Arts of the University of Missouri and Director of the Missouri Agricultural Experiment Station.

DAIRY CATTLE. M. A. Scovell, M. S., Director and Chemist of the Kentucky Agricultural Experiment Station; T. L. Haecker, Professor of Dairy Husbandry, College of Agriculture of the University of Minnesota; C. D. Smith, M. S., Superintendent of Farmers' Institutes and Dean of the Special Courses, Michigan Agricultural College, and Director of the Michigan Agricultural Experiment Station.

HORSES. Thomas F. Hunt, M. S., Dean, and Professor of Agriculture of the College of Agriculture and Domestic Science of Ohio State University.

SHEEP AND SWINE. John A. Craig, B. S. A., Editor of Iowa Homestead, former Professor of Animal Husbandry, Iowa State College of Agriculture and Mechanic Arts.

INSTRUCTION IN DAIRYING.

THE CHEMISTRY AND BACTERIOLOGY OF DAIRYING. H. W. Conn, Ph. D., Professor of Biology, Wesleyan University, and Bacteriologist of the Storr Agricultural Experiment Station; L. L. Van Slyke, Ph. D., Chemist of the New York State Agricultural Experiment Station.

METHODS OF BUTTER AND CHEESE-MAKING. H. H. Wing, M. S., Assistant Professor of Animal Industry and Dairy Husbandry, Cornell University and Agricultural Experiment Station; G. L. McKay, Professor of Dairying, Iowa State College of Agriculture and Mechanic Arts, and Agricultural Experiment Station; J. W. Decker, B. Agr., Professor of Dairying, Ohio State University.

INSTRUCTION AND RESEARCH IN DAIRYING IN FOREIGN COUNTRIES. E. W. Allen, Ph. D., Assistant Director, Office of Experiment Stations, U. S. Department of Agriculture.

COMMERCIAL ASPECTS OF DAIRYING. H. E. Alvord, C. E., Chief of Dairy Division, Bureau of Animal Industry, U. S. Department of Agriculture.

INSTRUCTION IN PLANT AND ANIMAL BREEDING

PRINCIPLES OF BREEDING. L. H. Bailey, M. S., Professor of Horticulture, Cornell University, and Horticulturist of Cornell Agricultural Experiment Station; Eugene Davenport, M. Agr., Dean, and Professor of Animal Husbandry, College of Agriculture of the University of Illinois, and Director of the Illinois Agricultural Experiment Station.

METHODS OF INSTRUCTION AND INVESTIGATION. BREEDING OF PLANTS. H. J. Webber, Ph. D., in charge of Laboratory of Plant Breeding, Bureau of Plant Industry, U. S. Department of Agriculture; W. N. Hays, M. S., Professor of Agriculture, College of Agriculture of the University of Minnesota, and Agriculturist of the Minnesota Agricultural Experiment Station.

BREEDING OF ANIMALS. C. S. Plumb, B. S., Professor of Animal Industry, Purdue University, and Director of the Indiana Agricultural Experiment Station.

COLLEGE OF ARTS, PHILOSOPHY AND SCIENCE

REQUIREMENTS FOR ADMISSION

Each applicant for admission must be provided with credentials from his last instructor or from the last institution with which he has been connected, showing that he was in good standing.

Applicants will be admitted on passing a satisfactory examination in the studies prescribed for admission or upon the presentation of diplomas and certificates from such high schools, academies and normal schools in Ohio as the General Faculty has approved. The list of high schools to which a definite standing has been assigned will be furnished on application to the President.

Such diplomas and certificates will be accepted in lieu of examination for preparatory studies only under the following conditions:

(a) The certificates must state in detail the studies pursued, the text-books used, the amount of work done in each study, the amount of time devoted to it, and the fact that the applicant has successfully passed in the work.

(b) The certificate will be accepted for such studies only, or such part of each, as it shall show to have been satisfactorily accomplished.

(c) Every such certificate must be accompanied with a diploma showing that the candidate has completed the course of study in the school from which he comes. *Blank certificates may be obtained by addressing the* EXECUTIVE OFFICE, OHIO STATE UNIVERSITY, COLUMBUS. Certificates should be filled out and returned to the University as early as possible after the close of the schools in June, and in any event, not later than September 1.

The requirements are first stated in brief by groups, after which the requirement in each study is given in full.

Twenty-two units, as described below, are required for *unconditional* admission. No one under twenty-one years of age* will be admitted on less than nineteen units. Of the total deficiency of three units, thus permitted, no more than one unit may lie in any one of the first four groups (A, B, C, D), and not more than two units may lie in group E. For *unconditional* admission the candidate must be prepared to offer:

A. Three units chosen from the following:
- (1) English Composition and Rhetoric..... 2 units
- (2) English Classics ..... 1 unit
- (3) English Literature ..... 1 unit

B. Three units chosen from the following:
- (4) Civil Government ..... 1 unit
- (5) United States History..... 1 unit
- (6) General History ..... 1 unit
- (7) Greek and Roman History..... 1 unit
- (8) English History ..... 1 unit

*A person twenty-one years of age, or over, who desires to pursue a special line of work and does not desire to become a candidate for a degree, may be admitted by vote of the Executive Committee to such classes as he is qualified to enter; provided, that if he afterwards becomes a candidate for a degree he must pass the requirements for admission at least one year before the degree is conferred.

C. Four units as follows:

(9)	Algebra	2 units
(10)	Plane and Solid Geometry	2 units

D. Three units chosen from the following, including Physics:

(11)	Physics	2 units
(12)	Physical Geography	1 unit
(13)	Botany	1 unit
(14)	Chemistry	2 units
(15)	Physiology	1 unit
(16)	Zoology	1 unit
(17)	Geology	1 unit

E. Nine units chosen from the following; or three *extra* units, chosen from the preceding groups, and six units from the following:

(18)	Latin	3 or 6 units
(19)	Greek	3 or 6 units
(20)	German	3 or 6 units
(21)	French	3 or 6 units
(22)	Spanish	3 or 6 units

The extent and character of the work required in each subject mentioned above is as follows:

(A) THE ENGLISH GROUP

Three units are required in this group. An applicant presenting *two* units in this group will be admitted *conditionally*, if his arrearage in all of the groups does not exceed three units. All arrearages must be made good within two years after admission.

(1) *English Composition and Rhetoric. Two units.* Each applicant must be able to write clear and correct English, and no applicant will be accepted in English whose work is seriously defective in spelling, punctuation, grammar, and paragraph structure. The proper preparation for this part of the requirement is practice in composition, at least once a week, through the four preparatory years, with correction of themes by the teacher and revision by the pupil. Subjects for themes should not be taken exclusively from literature; a large share of the subjects should be based upon the pupil's observation and experience. Practice should be afforded in writing narrative, description, exposition and argumentation. Applicants should be familiar with those principles of Rhetoric which are most helpful in elementary composition; viz., the principles of sentence structure, outlining, paragraphing, and choice of words. The amount and kind of work required is indicated in Scott and Denney's Composition-Rhetoric.

(2) *English Classics. One unit.* The following books, or *equivalents, should* be read with sufficient care to insure a knowledge of their story-plot, or argument, their chief incidents, and their principal characters; so that pupils may discuss them intelligently. Four or five of these books should be examined closely in class (at least once a week through three years), with reference to structure and leading characteristics of style. The list (until 1905) is as follows: Shakespeare's *Merchant of Venice, Julius Caesar,* and *Macbeth;* Milton's *Lycidas, Comus, L'Allegro,* and *Il Penseroso;* Burke's *Conciliation with the Colonies;* Macaulay's *Essays on Milton and Addison;* The Sir Roger de Coverly Papers in *The Spectator;* Goldsmith's *The Vicar of Wakefield;* Coleridge's *The Ancient Mariner;* Scott's *Ivanhoe;* Carlyle's *Essay on Burns;* Tennyson's *The Princess;* Lowell's *The Vision of Sir Launfal;* George Eliot's *Silas Marner.*

(3) *English Literature. One unit.* A good knowledge of the leading facts in the history of English Literature, as given in Scudder's English Literature, Johnson's History of English and American Literature or the Introductions by Pancoast, Painter, Halleck, or Newcomer; together with the reading of representative works of literature. One year at least three periods a week should be devoted to this study. This may be offered in lieu of subject (2), or as one of the *extra* units of group (E).

(B) THE HISTORY GROUP

Three units are required in this group. An applicant presenting *two* units in this group will be admitted *conditionally*, if his arrearage in all of the groups does not exceed three units. All arrearages must be made good within two years after admission. Preparation in excess of three units in this group may be offered in lieu of the extra units of group (E).

(4) *Civil Government. One unit.* A good knowledge of the origin, principles, forms and powers of the national, state and local governments is expected. Fiske's Civil Government, with a special study of the state from which the student comes, may serve to indicate the amount and kind of knowledge sought. One-half year of High School work, five periods a week, or one year, three periods a week, should be given to the subject. No credit upon certificate will be given for Civil Government where it has been studied merely as incidental to, and as a part of, the work in United States history.

(5) *United States History. One unit.* A good knowledge of the main facts and features of American history, especially of the period since 1750, is expected. Johnson's High School History of the United States, or McLaughlin's History of the American Nation, or Montgomery's Students' American History will serve to show the kind and amount of work sought. No credit upon certificate will be accorded in this subject for work done below the ninth grade. Three periods a week for one year, or five periods for one-half year should be devoted to this study.

(6) *General History. One unit.* Adams's European History, Myers's General History, or an equivalent. Three periods a week through one year, or five periods a week for one-half year, should be devoted to this study.

(7) *Greek and Roman History. One Unit.* Botsford's History of Greece and History of Rome, or equivalents. Three periods a week through one year, or five periods a week for one-half year, should be devoted to this study.

(8) *English History. One unit.* Montgomery's Leading Facts of English History, or equivalent. Three periods a week through one year, or five periods a week for one-half year, should be devoted to this study.

(C) THE MATHEMATICS GROUP

Four units are required in this group. An applicant presenting *three* units in this group will be admitted *conditionally*, if his arrearage in all of the groups does not exceed three units. All arrearages must be made good within two years after admission.

(9) *Algebra. Two units.* Taylor's Elements of Algebra, or an equivalent. *First unit*: The four fundamental operations, linear equations (single and systems), factoring, greatest common divisor, least common multiple, fractions and fractional equations, involution, evolution, irrationals, surds, complex numbers, quadratic equations (single and in systems) and equations like quadratics. *Second unit*: Irrational equations, higher equations solvable by factors, inequalities, ratio, propostion, variations, theory of exponents, indeterminate equations, theory of limits, progressions, permutations, combinations, logarithms. Since algebra is studied usually in the first two years of the high school course, it is recommended that a review of the subject be afforded in the fourth year with especial attention to the requirements of the *second* unit.

(10) *Geometry. Two units.* Venable, Beman and Smith, through one and one-half years, or an equivalent. *First unit*: Plane geometry with solution of originals. *Second unit*: Solid and spherical geometry with solution of originals given in the text-books named above. Instead of the *second* unit, the applicant may substitute *Plane Trigonometry*, as given in Lyman & Goddard's Plane Trigonometry. It is recommended that a review of geometry be afforded in the fourth year of the high school course, with especial attention to the requirements of the *second* unit.

(D) THE SCIENCE GROUP

Three units are required in this group, including physics. An applicant presenting *two* units in this group will be admitted conditionally, if his arrearage in all of the groups does not exceed three units. All arrearages must be made good within two years after admission. Preparation in excess of three units in this group may be offered in lieu of the *extra* units of group (E).

(11) *Physics. Two units.* Gage, Carhart and Chute, Avery, Appleton. One full year of daily work is necessary to meet the requirement in this subject. Laboratory training, to accompany the work of the text-book, is strongly recommended, but is not required for the present. A credit of *one* unit in Physics may be permitted for work less thorough than that indicated above.

(12) *Physical Georgraphy. One unit.* Tarr's, Davis's, or the Eclectic Physical Geography will be accepted as meeting the requirement. One year, three periods a week, or one-half year, five periods, should be devoted to this study.

(13) *Botany. One unit.* Kellerman's Elementary Botany and Spring Flora, or an equivalent. The course should included three periods a week for a year or five periods for a half year, divided between spring and fall.

(14) *Chemistry. Two units.* Remsen's Introduction to the Study of Chemistry, or its equivalent. For laboratory work, McPherson's Laboratory Exercises, arranged to accompany Remsen's Chemistry. The course should extend through at least one year, and should consist of at least three recitations and four hours' laboratory work weekly. No credit in chemistry will be allowed for preparatory work less thorough than that outlined above.

(15) *Physiology. One unit.* Martin's Human Body (brief course). Three periods a week through one year, or five periods a week for one-half year of high school work, should be devoted to this subject. No credit will be accorded in this subject for work done below the ninth grade.

(16) *Zoology. One unit.* Jordan and Kellogg's "Animal Life"; Kellogg's "Elementary Zoology"; Davenport's "Introduction"; or equivalent, with laboratory work or field work. Three periods a week through one year, or five periods a week for one-half year, should be devoted to this subject.

(17) *Geology. One unit.* Brigham's, Dana and Rice's (revised), Tarr's or LeConte's, may be used as texts. The recitations should be supplemented by study of the geological phenomena and formations found in the vicinity of the school. The course should include three periods a week for one year, or five periods for one-half year.

(E) THE FOREIGN LANGUAGE GROUP

Nine units are required in this group; or three *extra* units from the preceding groups, and *six* units from this. A deficiency of *two* units is allowed in this group if the total arrearage in all of the groups does not exceed *three* units. All arrearages must be made good within two years after admission.

(18) *Latin. Three to six units* may be offered as follows: *Three units* —Pronunciation (Roman method); Grammar (an exact knowledge of the inflections); Caesar, the first four books of the *De Bello Gallico. Fourth unit*— Cicero, six orations of Cicero, including *Pro Lege Manilia. Fifth and sixth units*

— Vergil, the first six books of the *Aeneid* with Prosody (one and one-half units); and Prose Composition, Daniell, or Collar, or Jones, or Dodge and Tuttle, entire (one-half unit). Latin cannot be continued as a University study unless at least five units are offered for admission. Four full years should be given to the preparation in Latin.

(19) *Greek. Three to six units* may be offered as follows: *Three units* — Grammar (Goodwin's preferred), and Prose Composition; or the first 100 lessons in White's Beginner's Greek Book. Reading: The first three books of Xenophon's *Anabasis*. At least two years should be devoted to this work. A *fourth* unit will be allowed for preparation in the fourth, fifth and sixth books of the Anabasis and three books of Homer's Iliad, and a *fifth* and *sixth* unit for additional reading in Greek.

(20) *German. Three* or *six* units may be offered as as follows: *Three units* — The pupil should be able to read at sight, and to translate, if called upon, by way of proving his ability to read, a passage of very easy dialogue or narrative prose, help being given upon unusual words and constructions; to put into German short English sentences taken from the language of every-day life or based upon the text given for translation, and to answer questions upon the rudiments of grammar as defined below. During the first year the work should comprise: (1) Careful drill upon pronunciation; (2) the memorizing and frequent repetition of easy colloquial sentences; (3) drill upon the rudiments of grammar, that is, upon the inflection of the articles, of such nouns as belong to the language of every?day life, of adjectives, pronouns, weak verbs, and the more usual strong verbs, also upon the use of the more common prepositions, the simpler uses of the model auxiliaries, and the elementary rules of syntax and word-order; (4) abundant easy exercises designed not only to fix in mind the forms and principles of grammar, but also to cultivate readiness in the reproduction of natural forms of expression; (5) the reading of from 75 to 100 pages of graduated texts from a reader, with constant practice in translating into German easy variations upon sentences selected from the reading lesson (the teacher giving the English), and in the reproduction from memory of sentences previously read. During the second year the work should comprise: (1) The reading of from 150 to 200 pages of literature in the form of easy stories and plays; (2) accompanying practice, as before, in the translation into German of easy variations upon the matter read, and also in the off-hand reproduction, sometimes orally and sometimes in writing, of the substance of short and easy selected passages; (3) continued drill upon the rudiments of the grammar, directed to the ends of enabling the pupil, first, to use his knowledge with facility in the formation of sentences, and, secondly, to state his knowledge correctly in the technical language of grammar.

Six units. The applicant must offer, in addition to the above, two additional years of instruction in German, including a review of the essentials of grammar. The rapid reading of at least 200 pages of prose; for example, the following: Heyse's L'Arrabiata, Riehl's Der Fluch der Schönheit, Hauff's Lichtenstein. The outlines of German literature should be mastered. In connection with this about 200 pages of German ballads and lyrics should be read. Some book like v. Klenze's Deutsche Gedichte might be used. A considerable portion of the prose and poetry should be read extemporaneously. About 50 pages in some prose composition should be translated. Text-books suggested are: v. Jagemann's, Poll's or Harris's Prose Composition. The work in composition should be carried on as far as possible in German. Oral exercises should be had in this entire course, as far as they may be used without interfering with the thoroughness of the work.

(21) *French. Three* or *six units* may be offered as follows: *Three units* — Applicants should be able to pronounce French accurately, to read at sight

easy French prose, to put into French simple English sentences, taken from the language of every-day life, or based upon a portion of the French text read, and to answer questions on the rudiments of the grammar as defined below. Two years should be given to this preparation. During the first year the work should compromise: (1) Careful in drill pronunciation; (2) the rudiments of grammar, including the inflection of the regular and the more common irregular verbs, the plural of nouns, the inflection of adjectives, participles and pronouns; the use of personal pronouns, common adverbs, prepositions and conjunctions; the order of words in the sentence, and the elementary rules of syntax; (3) abundant easy exercises, designed not only to fix in the memory the forms and principles of grammar, but also to cultivate readiness in the reproduction of natural forms of expression; (4) the reading of from 100 to 175 duodecimo pages of graduated texts, with constant practice in translating into French easy variations of the sentences read (the teacher giving the English), and in reproducing from memory sentences previously read; (5) writing French from dictation. During the second year work should comprise: (1) The reading of from 250 to 400 pages of easy modern (nineteenth century) prose in the form of stories, plays of historical or biographical sketches; (2) constant practice, as in the previous year, in translating into French easy variations upon the texts read; (3) frequent abstracts, sometimes oral and sometimes written, of portions of the text already read; (4) writing French from dictation; (5) continued drill upon the rudiments of grammar, with constant application in the construction of sentences; (6) mastery of the forms and use of pronouns, pronominal adjectives, of all but the rare irregular verb forms, and of the simpler uses of the conditional and subjunctive.

Six units. The applicant should be able to read at sight, with the help of a vocabulary of special or technical expressions, difficult French not earlier than that of the seventeenth century; to write in French a short essay on some simple subject connected with the works read; to put into French a passage of easy English prose and to carry on a simple conversation in French. Four years should be given to this preparation.

(22) *Spanish. Three* or *six units* may be offered as follows: *Three units.* Applicants should be able to pronounce Spanish accurately, to read at sight easy Spanish prose, to put into Spanish simple English sentences taken from the language of every-day life, or based upon a portion of the Spanish text read, and to answer questions on the essentials of the grammar. Two years should be given to this preparation, the first year being spent mainly on the grammar with easy reading and oral practice; the second devoted to reading good modern Spanish, with grammatical analysis and exercises in writing. The texts read should be chiefly narrative and conversational prose, including one or more prose dramas of the present age.

Six units. The applicant should be able to read at sight, with the help of a vocabulary of special or technical expressions, difficult Spanish, whether prose or poetry; to write in Spanish a short essay on some simple subject connected with the works read, which shall show a thorough knowledge of syntax; to put into Spanish a passage of easy English prose, and to carry on a simple conversation in Spanish. Four years should be given to this preparation.

ADMISSION TO SPECIAL STUDIES.

(See page 64.)

ADMISSION TO ADVANCED STANDING.

(See page 64.)

ADMISSION TO GRADUATE WORK.

(See page 66.)

REQUIREMENTS FOR GRADUATION

UNDERGRADUATE COURSES OF STUDY

The entire work of the College of Arts, Philosophy, and Science has been recently reorganized on the group and elective system. While under the new system the "courses'* formerly offered in this College, quite rigid and independent of one another, do not appear as such, it will be found that several of the new groups correspond to the former "courses," in their chief studies and leading aims, but with much greater flexibility and much freer opportunities for election in each group. The new system also provides for many other "courses" than have hitherto been possible, having equally specific aims. The groups, so far as at present arranged, number fourteen. This number will be increased as reasonable demand may arise for new groups. The characteristic features of each group may be judged from its name which is made up of the names of the chief studies of the group. The groups at present recommended are given at page

Under the new system about one-third of every student's "course" is prescribed. Each student is required to lay sufficiently broad foundations, during the first two years, in English, in two other languages to be chosen by himself, in mathematics and one science, or in two sciences to be chosen by himself, and in history, economics, English literature, or philosophy. The remaining two-thirds of each student's "course" is elective; but in order to insure substantial results in the studies thus freely chosen, the student is required to continue two of his first-year studies (any two) through the second year, one of his second-year studies (any one) through the third year, and one of his third-year studies (any one) through the fourth year. The freedom permitted in the groups is thus large enough to enable a student who had insufficient acquaintance with his own tastes and tendencies when he entered the College and who selected a curriculum that proved unsatisfactory in some respects, to rectify the error by shifting his choice of a study or studies to be continued from year to year. In order to guard against the danger of too narrow or too wide a range of work, a maximum and a minimum number of departments is fixed in which the student is allowed to work during any one year of his "course." In the first and second years the number of departments thus fixed is four or five; in the third and fourth years the number is three or four.

The limitation of the number of departments to three or four in the third and fourth years renders unnecessary the former regulation respecting a major study. The thesis regulation as a specific "course" requirement is likewise abandoned since most students will inevitably arrive in their fourth year at advanced seminary or laboratory courses, in the departments of their choice, which will necessarily involve training in methods of research with statement of results. The degree conferred at the satisfactory completion of a "course" in the College of Arts, Philosophy, and Science will hereafter be the degree of Bachelor of Arts.

Included in the large number of studies freely offered to students of this College are a few courses primarily intended for students of other colleges of the University,—courses in drawing, photography, art, mineralogy, metallurgy, land surveying, thermodynamics, electrical engineering, law, and domestic science. These courses may be chosen by students of this College as part of the work counting towards their degree.

*Arts or Classical, Latin Philosophy, Modern Language Philosophy, English Philosophy, General Science, Commerce and Administration, Education, Preparatory to Law, Preparatory to Medicine, Preparatory to Journalism

All members of the Faculty, but the Dean and the members of the Executive Committee most especially, are always glad to advise with the students respecting choice of studies.

REQUIREMENTS.

On satisfactory completion of 180 term hours under the restrictions prescribed below, the student will be recommended for the Degree of Bachelor of Arts.

The 180 term hours must include the following, amounting to 57 term hours:

(a) Rhetoric 1 (2-2-2) 6 term hours.

(b) Two of the following subjects: (8-8-8) 24 term hours.
Greek 1 or 7, 8, 9; Latin 1, 2, 3;
French 1 or 2; German 1 or 4; Spanish 1 or 2.

(c) Mathematics 31, 32, 33 and 24. (6-6-6) 18 term hours; or
two of the following subjects: (6-6-6) 18 term hours.
Mathematics 21, 22, 23; Physics 11 or 2;
Chemistry 1; Botany 21, 22, 23; Zoology 1;
Geology 17; Physiology 1.

(d) One of the following subjects: (3-3-3) 9 term hours.
European History 1 or 14; American History 1;
Economics 1 or 2, 3, 4; Philosophy 15, 16, 17, or 18, 19;
English Literature 1.

For the remaining 123 term hours required for graduation the student may elect from any course announced in this College (see page 141 and following) for which he is qualified.

FIRST YEAR.

(a) Fifteen or sixteen hours each term, chosen from the prescribed work indicated above, including Rhetoric 1.

(b) Cadet service (men); Hygiene and Physical Training (women); required throughout the first year.

SECOND YEAR.

(a) Fifteen hours each term. This must include all the prescribed work not done in the first year; the other work of the second year to be in three or four departments of which at least two shall be departments in which the student has worked during the first year.

(b) Cadet service (men); Hygiene and Physical Training (women); required through the second year.

THIRD YEAR.

Fifteen hours each term in three of four departments, at least one to be a department in which the student has worked during the second year.

FOURTH YEAR.

Fifteen hours each term in three or four departments, at least one to be a department in which the student has worked during third year.

EXTRA HOURS.

A student who has postponed a study in group (b) from the first to the second year, may take sixteen hours in the second year and by the permission of the Executive Committee a student who has shown exceptional proficiency may be allowed to undertake from one to three extra hours. No extra hours will be granted to a first-year student, or to any student with conditions outstanding.

RULE GOVERNING ELECTIONS.

Each student enrolled in the College of Arts, Philosophy and Science must file at the Registrar's office not later than June 1st of each year a complete statement of the courses he wishes to enter the following year. Blanks for this purpose may be obtained of the Registrar.

FIRST YEAR OPTIONS.

In order to meet the requirements for graduation, the first-year student must arrange his work on one of the following plans:

I. Rhetoric; two languages; two sciences, or mathematics and one science, or mathematics alone; deferring until the second year the selection from group (d), above.

II. Rhetoric; two languages; mathematics or science; one subject from group (d); deferring until the second year a second subject from group (c), above.

III. Rhetoric; one language; two sciences, or mathematics and one science, or mathematics alone; one subject from group (d); deferring until the second year the second language from group (b), above.

In order to assist the student in his choice of work for the first two years, more specific directions are given below in connection with various natural groupings of studies. *These groups are not mandatory.* The student may make other combinations than those suggested, provided his selection of studies fulfills one of the three options given above. In the second year many other combinations are possible. The time schedule, however, is arranged primarily to fit the combinations recommended. The days and hours at which each study is taught may be found by looking up that study on page 141 (et seq.) of this catalogue. The title of a group indicates the chief studies of that group. For the work of the first-year student, groups 1 to 6 recommend a complete curriculum. Groups 7 to 14 name only one or two first-year studies, it being understood that the remaining studies of the first year will be chosen as recommended in some one of the first six groups.

STUDY GROUPS.

1. *Greek-Latin.* First year: Greek 1 or 7, 8, 9; Latin 1, 2, 3; Rhetoric 1; and either 6 hours in (c) or 3 hours in (c) and 3 hours in (d). Second year: Greek 7, 8, 9, or 10, 11, 12; Latin 4, 5, 6. This group corresponds to the former Classical or Arts Course. Before choosing the 3 hours in (d) read groups 7 to 12. Before choosing the work in (c) read groups 4 to 6.

2. *Latin-Modern Language.* First year: Latin 1, 2, 3; French 1 or 2, German 1 or 4, or Spanish 1 or 2; Rhetoric 1; and either 6 hours in (c) or 3 hours in (c) and 3 hours in (d). Second year: Latin 4, 5, 6; French or German, or Spanish, continued. This group corresponds in general to the former Latin-Philosophy Course. Before choosing the 3 hours in (d) read groups 7 to 12. Before choosing the work in (c) read groups 4 to 6.

3. *Modern Languages.* Substitute two modern languages for Greek and Latin in group 1 above. *Not more than one new language should be begun in the first year.* The student who offers but one language for admission and who does not desire to continue that language in the University should follow the arrangement of language studies suggested in the next group. This group corresponds in general to the former Modern Language Philosophy Course. Before choosing the work in (d) read groups 7 to 12. Before choosing the work in (c) read groups 4 to 6.

4. *General Science.* First year: German 1 or 4, or French 1 or 2; Chemistry 1; Mathematics 21, 22, 23; Rhetoric 1; 3 hours in (d). Second year: Continue Chemistry and one other study of the first year; add a second modern language and one of the following: Physics 2; Botany 21, 22, 23; Physiology 1; Zoology 1; Geology 17; Astronomy 1. This group corresponds in general to the former Course in Science. It also opens the way to a thorough professional course in Chemistry. Before choosing the word in (d) read groups 7 to 12.

5. *Mathematics-Physics-Astronomy.* First year: Mathematics 31, 32, 33, 24; French 1 or 2, or German 1 or 4; Rhetoric 1; 3 hours in (d). Second year: Mathematics 41, 42, 43; Physics 2, Chemistry 1; Rhetoric 10; and a second modern language. Third year: Astronomy 1 and 2. Instead of Mathematics 31, 32, 33, 24 in the first year, Chemistry 1 and Mathematics 21, 22, 23, may be chosen, to be followed by Mathematics 28 in the second year. This group emphasizes the sciences named in the title. Before choosing the work in (d) read groups 7 to 12.

6. *Biological Sciences.* First year: French 1 or 2, or German 1 or 4; Chemistry 1; Botany 21, 22, 23, or Zoology 1; Rhetoric 1; 3 hours in (d). Second year: Botany; Zoology; Physiology 1, or Physics 11, or Geology 17; and a second modern language. This group corresponds to the former Course Preparatory to Medicine. Before choosing the work in (d) read groups 7 to 12.

7. *English-Rhetoric.* First year: Include English Literature 1. Second year: Include European History 14; English Literature 2, 3, 4, or 5, 6, or 18 and either Rhetoric 15, 16, or Rhetoric 2, 3, with Philosophy 18, 19. This group corresponds to the former English Philosophy Course and Course Preparatory to Journalism.

8. *Economics-History.* First year: Include European History 1, or Economics 1 or 2, 3, 4. Second year: Include American History 1, and the subject named above not taken in the first year, continuing the other. This group corresponds to the former English Philosophy Course and Course Preparatory to Law and Journalism.

9. *History — Political Science — Administration.* First year: Include American History 1, or European History 1 or 14. Second year: Include Political Science 1 or Economics 1 and the subject named above not taken in the first year. European History 4 should be taken later. The student who has not a reading command of French or German should begin French or German not later than the second year, continuing the study during two years. This group corresponds to the former Course in Administration. It opens the way to a thorough preparation for law or the public service.

10. *Commerce Law.* First year: Include German 1 or 4, and Economics 1. Second year: Include Economics, and American History 1 or Elementary Law. This group corresponds to the former Course in Commerce and opens the way to a thorough preparation for a business career.

11. *Sociology-Philosophy.* First year: Include Economics 2, 3, 4. Second year: Include Sociology, Philosophy 15, 16, 17 and one of the following: American History 1, European History 1, Economics 1 or 5, 6, 7. This group emphasizes the studies regarded as essential in preparation for certain important forms of municipal and social service.

12. *Philosophy-Education.* First year: Include Philosophy 18, 19. Second year: Include Philosophy 20, 21 and Education 1, 2, or 3. This group corresponds to the former Course in Education, opening the way to a thorough study either of philosophy, or of educational problems.

13. *General Literature.* Continue both languages offered for admission, begin a third language in the second year and a fourth in the third year. Include English Literature 1 and European History 14 in the work of the first two years, and take Philosophy 15, 16, 17, or 18, 19, in second or third year.

14. *General Philology.* Greek if not offered for admission should be begun in the first year and Latin continued. Second year: Include English Language 15, 16, and German 1 or 4. Note prerequisites for courses 14; 15, in French; 14 to 21 in Germanic Languages; 19, 20, 21 in Greek; 12 to 25 in Latin; 17 to 20 in English Language.

THE COLLEGE OF ENGINEERING

Since the inception of the University, the College of Engineering has maintained a vigorous and steady growth. To a large extent this growth represents the demand of the people from whom the University derives its support, for it has been the constant policy of the University to enlarge and foster each branch of educational work in response to every intelligent demand.

Yet it is true that the State has advanced and shaped public opinion by providing education facilities somewhat in advance of public demand. Through its University it has established and built up a system of technical education which is more important than any other single agency in the development of the commercial and industrial interests of Ohio. The marvellous industrial progress made in this State and country in recent years is the best indication of the benefits which have already begun to accrue from the enlargement of technical training, and from its constant subdivision and expansion.

At present the College offers instruction in nine important fields of Engineering work. Covering these, the following four-year courses of study are given:

1. *Architecture*, leading to the degree of Civil Engineer in Architecture (C. E. in Arch.). Established in 1900.
2. *Ceramics*, leading to the degree of Engineer of Mines in Ceramics (E. M. in Cer.). Established in 1896.
3. *Chemical Engineering*, leading to the degree of Bachelor of Science in Chemical Engineering (B. Sc.). Established in 1902.
4. *Civil Engineering*, leading to the degree of Civil Engineer (C. E.). Established in 1873.
5. *Electrical Engineering*, leading to the degree of Mechanical Engineer in Electrical Engineering (M. E. in E. E.). Established in 1889.
6. *Industrial Arts*, leading to the degree of Bachelor of Science in Industrial Arts (B. Sc.). Established in 1893.
7. *Manual Training*, leading to the degree of Bachelor of Science in Industrial Arts (B. Sc.). Established in 1893.
8. *Mechanical Engineering*, leading to the degree of Mechanical Engineer (M. E.). Established in 1879.
9. *Mining Engineering*, leading to the degree of Engineer of Mines (E. M.). Established in 1878.

The following courses do not lead to degrees, but students completing them are furnished with formal certificates setting forth the work they have accomplished:

10. *Clay-working*, two years. Established in 1894.
11. *Industrial Arts and Shopwork*, two years. Established in 1896.
12. *Mining*, two years. Established in 1887.

The instruction necessary to the completion of these various courses of study is given in twenty-one different departments, under eighty-four professors and assistants. In addition, in some of the courses in this College elective work is offered, which may be taken from any of the thirty-seven departments of the University.

The various departments directly connected with the College of Engineering, occupy about two-thirds of Chemical Hall, nearly the whole of Hayes Hall, the whole of the Mechanical and Electrical buildings, portions of Orton Hall and of the main University building. The equipment for teaching technical and scientific subjects is, in the main, excellent, and in some departments is exceptional. In all departments the annual increase in apparatus and facilities is rapidly making the equipment more perfect and complete.

The Library of the University, consisting of about 44,000 volumes, is able to fill the demands of the Engineering students for the most important treatises in their respective fields of science.

ADMISSION

Applicants for admission to the College of Engineering must be at least 17 years of age. They must be provided with testimonials of good moral character from their last instructor. If they have previously attended any other college or university, they must present a letter of honorable dismissal therefrom. They must also give evidence of proficiency in the studies required for admission, either by *certificate or examination.*

CERTIFICATES

Certificates will be accepted in place of examination for those studies covered by them, when presented by graduates of such High Schools, Academies and Normal Schools in Ohio as have had their courses of study duly approved by the University.

In cases where the University faculty has specially designated any High School, on account of the high character of its work, as entitled to the privilege, students who have attended the school for at least two full years may present certificates for such entrance subjects as their work has covered, and will receive credit for the same.

Certificates, to be considered, must contain a detailed statement of the studies pursued, the text book used, the amount of work done in each study, the amount of time devoted to it and the applicant's rank or standing. Blank forms of such certificates will be furnished on application.

All certificates will be passed upon by officers of the College of Engineering, and where certificates are received prior to September 1, applicants will b notified by mail, of the subjects, if any, upon which their certificates will be accepted in lieu of examination. In those subjects in which credit is not allowed, the regular entrance examination must be passed. Certificates sent in later than September 1 will be given the same consideration as those received earlier, but the College will not undertake to reply by mail and delay in matriculation may result.

EXAMINATIONS

Applicants presenting no certificates, together with those whose certificates are not accepted in full satisfaction of the entrance requirements, must pass examination on the subjects set forth below, or in such part of the same as has been found unsatisfactory in their certificate.

Entrance examinations will be held on Monday and Tuesday, June 16 and 17, and on Monday and Tuesday, September 22 and 23. Examinations not taken in this period may be taken thereafter subject to the convenience of the Professor in charge.

FEES.

Each student is required to pay an incidental fee of eighteen dollars a year, and the usual fees for the expense of laboratory work. Tuition is free.

Laboratory Fees.—Students in the laboratories and shops are required to pay fees to cover, in part, the cost of the material consumed, and the deterioration of the expensive instruments used by them. The fees charged per term in the laboratories mentioned below are as follows:

Ceramics, 9, 10 11	$5 00
Drawing, 7	2 00
Electrical Engineering Laboratory, 3 hrs. or less, $5; over 3 hrs.	7 00
Gymnasium locker (if desired)	1 00
Mechanical Engineering, 12, 14, 15, 17, 24, 25, 27, 28, 29, 30 or 35	5 00
Physics Laboratory 3 hrs. or less, $5; over 3 hrs.	7 00
Shop Work, 4 hrs. or less, $5; over 4 hrs.	7 00

In the laboratories of the Department of Chemistry, Ceramics and Metallurgy, each student is required at the beginning of each term to pay a fixed charge of one dollar and fifty cents for gas and water. He is also required to buy his own supplies, which may be obtained at the storeroom in Chemical Hall. With reasonable care, this expense need not exceed $5.00 per term.

All term dues must be paid at the opening of each term as a condition of admission to classes.

A fee of five dollars to cover expenses of graduation, diplomas, etc., is required of each person receiving one of the ordinary degrees from the University, and this fee must be paid before the degree is conferred.

GRADUATION

THESIS

As a requisite for graduation, each candidate must present an acceptable thesis, embodying the results of a special study. The subject of this study must lie within the field of the degree sought. The subject must be filed with the President of the University (dependent upon the approval of the head of the Department), on the official blank provided for the purpose, not later than December 15 of the University year in which the degree is sought. The completed thesis must be submitted to the head of the department concerned not later than th scond Saturday before Commencement Day.

The accepted thesis — on standard paper, as per sample in the President's office, typewritten or printed, neatly bound in black cloth, gilt-lettered on first cover with the thesis title, name of author, degree sought and year of graduation — must be filed not later than the Friday preceding Commencement Day.

DEGREES

The degree of Civil Engineer in Architecture is conferred on those who have completed the course in Architecture; that of Engineer of Mines in Ceramics on those who have completed the Course in Ceramics; that of Bachelor of Science in Chemical Engineering on those who have completed the Course in Chemical Engineering; that of Civil Engineer on those who have completed the Course in Civil Engineering; that of Mechanical Engineer in Electrical Engineering on those who have completed the Course in Electrical Engineering; that of Bachelor of Science in Industrial Arts on those who have completed the Course in Industrial Arts, or the Course in Manual Training; that of Mechanical Engineer on those who have completed the Course in Mechanical Engineering; that of Engineer of Mines on those who have completed the Course in Mining Engineering.

Except by unanimous consent of the Faculty, no candidate for graduation will be recommended for a degree whose record is not in all respects complete by the Friday evening previous to the Commencement Day on which he seeks the degree.

ATTENDANCE

REGISTRATION

All students are required to register and pay their term fees on or before the first day of each term (See Days and Dates, page 5) between the hours of 8:00 a. m. and 12 m., or between 1:00 and 4:00 p. m., central standard time.

Former students who fail to register as above will be charged one dollar in addition to the usual incidental fee, for the first day of delinquency, and fifty cents additional for each subsequent day.

No candidate for graduation will be permitted to register for the second term of his graduating year, except upon presentation to the Bursar of the President's certificate that his thesis subject has been announced and approved.

AMOUNT OF WORK

No student is permitted to take less than fifteen credit hours a week of any sort of work, except by special permission, and no student will be permitted to take more than the regular work of the class to which he belongs, who has not passed all his work for the preceding term. A *credit hour* means one hour class room work in lecture, recitation or quiz, or two hours of laboratory work, once a week for one term.

ELECTIVE STUDIES

All elections of work in continuous studies, when once made, are understood to be made for the entire collegiate year.

The right is reserved to each professor to withdraw the offer of any elective study when it is not chosen by at least four persons.

CONSULTATION

For consultation or information regarding work in any class or department, students will apply to the professor or instructor in charge.

For consultation or information in regard to their status as members of the College of Engineering, or for the filing of petitions, changes of course, changes of class cards, adjustment of schedules and similar needs, students will apply to the Secretary, who can be found every school day at his desk in the faculty room, University Hall, from 9 to 10 a. m.

On matters affecting their connection with the University, or in any way connected with the discipline of the institution, students will apply to the President of the University.

STANDING

At the close of any term a student failing to pass in two-thirds of his work will be considered on *probation* for the next three terms; and a second similar failure incurred while thus on "probation" will forfeit his connection with the University.

REQUIREMENTS FOR ADMISSION TO THE FOUR YEAR COURSES

Applicants to be admitted to full University standing must obtain credit for all the subjects given below before entrance. Applicants slightly in arrears may be admitted to Freshman work, subject to certain entrance conditions. For the information of such applicants, a weighting is attached to those subjects in the following list upon which entrance conditions are permitted. From these they may determine their claims to admission and the subjects in which to strengthen themselves before coming to the University.

I. MATHEMATICS

Algebra. *Taylor's "Elements of Algebra' or an equivalent. Special attention should be given to the four fundamental operations, linear equations (single

* The student in an engineering course is badly crippled unless he can use his mathematics with confidence, accuracy, and rapidity. He should be able to perform any operation and solve any ordinary problem in the above list of subjects and determine the correctness of his results. This skill can only be acquired by practice.

The student intending to enter the Engineering College is advised to review his Algebra, making it a point of honor to solve every exercise in the text book used. If his High School work has been well done, and if he possesses the mathematical ability, together with that self-reliance and determination without which he cannot succeed as an engineer, he should be able to make this review with little or no assistance.

and in systems), factoring, highest common factor, lowest common multiple, fractions, and fractional equations, involution, evolution, surds and complex quantities; quadratic equations solved by factoring, by complete square, and by the *general formula;* irrational equations, simultaneous quadratic equations, higher equations solvable by factoring, ratio, proportion, progressions, theory of exponents, binominal theorem, and logarithms.

Geometry, Plane and Solid. Venable's, Wentworth's, White's or Wells'. *No deficiencies are permitted in Mathematics.*

II. ENGLISH

English Composition and Rhetoric, and English Classics. Each applicant will be tested as to his ability to write clear and correct English. The test will be the writing of several brief essays, of which one will be upon a subject drawn from the applicant's observation or experience, and the others upon topics requiring a knowledge of the following books, *or equivalents:* Shakespeare's *Merchant of Venice, Julius Caesar,* and *Macbeth;* Milton's *Lycidas, Comus, L'Allegro, and Il Penseroso;* Burke's *Conciliation with the Colonies;* Macauley's *Essays on Milton and Addison;* The Sir Roger de Coverly Papers in *The Spectator;* Goldsmith's *The Vicar of Wakefield;* Coleridge's *The Ancient Mariner;* Scott's *Ivanhoe;* Carlyle's *Essays on Burns;* Tennyson's *The Princess;* Lowell's *The Vision of Sir Launfal;* George Eliot's *Silas Marner.*

A weighting of two units is placed on English Composition and Rhetoric; and one unit on English Classics.[1]

III. LANGUAGE.

A knowledge of *one* language other than English is required for admission. French or German is preferred, but Latin will be accepted. Students preparing for an Engineering Course are advised to take as early an opportunity as possible to begin the study of a modern language.

Those entering with French or German only will be required to pursue the same language during their first year.

Latin. Pronunciation (the Roman method); Grammar (an exact knowledge of the inflections is essential); Cæsar, the first four books of the De Bello Gallico.

French. The whole subject of French Grammar. Applicants will be expected to read at sight easy French and to translate correctly into French, simple English sentences.

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[1] To meet the English requirement the schools should provide courses in composition-practice and courses in English classics extending side by side through the preparatory years.

In the courses in composition, pupils should be afforded regular and abundant practice in preparing narrative, descriptive, expository and argumentative themes, and should be familiarized with those principles of Rhetoric which are most helpful in composition, such as the principles of sentence-structure, outlining, paragraphing, and choice of words. Scott and Denney's Composition-Rhetoric is recommended as a guide. The study of specimens of bad English from a text-book is not recommended; in order to insure accuracy, a considerable amount of the written work of the pupils should be corrected by the teacher and revised and rewritten by the pupils themselves. Some of the composition-work may be based upon the reading prescribed above, but much of it should be based upon the observation and experience of the pupils.

In the course in English classics, pupils should read the prescribed books with sufficient care to become familiar with the plot, incidents, and characters of all of them and should also learn something of their authors and of their places in literary history. A few of these books, or portions of all of them, should be examined closely with reference to form, structure, method, language, and leading characteristics of style. The voluntary outside reading of additional books should be encouraged by the teacher. In connection with all of the reading it is recommended that the memorizing of notable passages of prose and poetry be required.

German. Joynes-Meissner's German Grammar, complete; Joynes' German Reader, complete; Hauff's Lichtenstein, Lessing's Minna von Barnhelm, Huss's Sessenheim and Buchheim, Goethe's Dichtung und Wahrheit. *A weighting of three units is placed on either of the three languages.*

IV. HISTORY

United States History. Mc. Laughlin's History of the American Nation preferred. *A weighting of one unit is placed upon this subject.*

General History. Myers's General History, or equivalent. *A weighting of one unit is placed on this subject*

Civil Government. Fiske or Thorpe preferred. *A weighting of one unit is placed on this subject.*

V. SCIENCE.

Physics. Carhart and Chute, Gage, Avery or an equivalent. *A weighting of two units is placed on this subject.*

Physical Georgraphy. Geikie's Elementary Lessons or its equivalent. *A weighting of one unit is placed on this subject.*

ENTRANCE CONDITIONS

No student will be admitted to the College of Engineering who is in arrears more than *two units* none of which may be in mathematics, unless he is over 21 years of age. In that case, his deficiencies may include entrance language in addition to the above amount.

In the case of students who cannot meet the language requirements, the following arrangements will be made:—

1. Those entering with less than the required amount of Latin may make good their deficiency by an equivalent amount of work in French, German or Spanish. For this work they will receive no college credit.

2. Those over 21 years of age, entering with no training in language, may make good their deficiency by beginning either French, German or Spanish in the college. For this work they receive no college credit.

REMOVAL OF CONDITIONS

All entrance conditions must be removed by the end of the second year, and by examination by the University officers. Certificates will not be received for entrance conditions after matriculation.

ADMISSION TO SPECIAL STUDIES

(See page 64.)

ADMISSION TO ADVANCED STANDING

(See page 64.)

ADMISSION TO GRADUATE WORK

(See page 66.)

COURSES OF STUDY.

All engineering education is based on the constant use of the fundamental sciences, mathematics, physics and chemistry, supplemented by training in the art of expression, both by language and by drawing. It naturally follows therefore that all engineering courses start from a common point, proceed side by

side for a time, but specialize and subdivide more and more as they progress toward completion, until in the last year they present but little work in common.

Further, it is very commonly the case with young men entering college for a technical education, that they are following ambitions not founded on any knowledge of their own natural aptitudes or capacities, and that they are in no way prepared to make a wise or final selection of their life work at that time.

For the two foregoing reasons, the first years of each of the engineering courses leading to a degree, are made identical throughout. The student is enrolled as a "First-year Engineer." His selection of the course he wishes to pursue is deferred to the opening of his second year, by which time he has become acquainted to some extent with University standards and methods, with the scope of the various courses offered, and with his own tastes and powers.

FIRST YEAR

NOTE — The figure in parenthesis following the name of each study indicates the number of that study in its department. A full description of department work follows this statement of Courses.

FIRST TERM.	Credit hours	SECOND TERM.	Credit hours	THIRD TERM.	Credit hours
Mathematics (31) Algebra.	5.	Mathematics (32) Trigonometry.	5.	Mathematics (33) Analytics.	5.
Chemistry (7) Inorganic.	5.	Chemistry (7) Inorganic.	5.	Chemistry (12) Qualitative Analysis.	4.
Modern Language French, Ger. or Spanish.	4.	Modern Language French, Ger. or Span.	4.	Modern Language French, Ger. or Spanish.	4.
Rhetoric (1) and (21) Composition.	2½.	Rhetoric (1) and (21) Composition.	2½.	Rhetoric (1) and (21) Composition.	2½.
Drawing (1) Freehand.	2.	Drawing (1) Freehand.	2.	Drawing (2) Lettering.	3.
Drill and Gymnasium.		Drill and Gymnasium.		Drill.	

SUMMER TERM IN SHOP WORK.

Students electing courses named below are required to take Shopwork courses in the summer term as follows:

Chemical Engineering — Shopwork (7) and (11), at the close of the first or second year.

Electrical Engineering — } Two from Shopwork (4), (7) and (11), at the close of the first
Mechanical Engineering — } year.

OUTLINE OF THE COURSE IN ARCHITECTURE AND DRAWING

This course is designed to produce men who unite a thorough knowledge of those phases of engineering which deal with the materials and methods of architectural construction, and a special training in appropriate and harmonious use of form, color, and decorative design.

Mathematics, the foundation for the solution of constructive problems, is studied for two years, and in the technical work of the course its use is constant.

Drawing is an important factor in the education of the architect, and includes that of the engineer and of the artist, being controlled partly by considerations of fact and partly by those of appearance. It extends in some form throughout the course, including freehand, mechanical, descriptive geometry, shades and shadows, perspective, pen drawing, brush drawing in color, clay-modeling; and is applied in the architectural designing.

The engineering technical work includes: strength of material, testing materials, stresses in trusses and framed structures, masonry, mortars, electricity and surveying. The course in physics is supplemented with two terms of electrical engineering; and a laboratory course in experimental mechanical engineering succeeds the regular course in mechanics and strength of materials. The technical architecture includes: designing architectural structures complete, specifications, heating, ventilating, plumbing, estimates, fire-proofing, superintendence and contracts.

The history of architecture, necessary to broaden the student's architectural knowledge, is given a prominent place, and is freely illustrated by a selected set of lantern slides.

FIRST YEAR.

NOTE — The figure in parenthesis following the name of each study indicates the number of that study in its department. A full description of department work follows this statement of Courses.

(See page 141)

SECOND YEAR

First Term.	Credit hours	Second Term.	Credit hours	Third Term.	Credit hours
Drawing (3) Projections.	3.	Drawing (3) Descriptive Geometry.	5.	Drawing (3) Shades, Shadows.	5.
Mathematics (41) Calculus.	5.	Mathematics (42) Calculus.	5.	Mathematics (43) Calculus.	5.
Physics (2) Mechanics, Heat.	3.	Physics (2) Electricity, Magnetism.	3.	Physics (2) Light, Sound.	3.
Architecture (9) History of Architecture.	3.	Architecture (10) History of Architecture.	3.	Architecture (11) History of Architecture.	3.
Architecture (12) Detail Drawing.	2.	Architecture (13) Detail Drawing.	2.	Architecture (14) Detail Drawing.	2.
Drawing (14) Pen Drawing.	2.				
Drill and Gymnasium.		Drill and Gymnasium.		Military Drill.	

THIRD YEAR.

Mathematics (71) Statistics.	5.	Mathematics (72) Strength Mat'ls, Kinet's.	5.	Mathematics (73) Kinetics, Hydraulics.	5.
Architecture (15) Designing.	4.	Architecture (16) Designing.	2.	Architecture (17) Designing.	4.
Drawing (7) Photography.	2.	Drawing (12) Clay Modeling.	2.	Drawing (12) Clay Modeling.	2.
Elec. Engineering (6) Lectures.	2.	Elec. Eng. (6) and (7) Lectures and Lab.	4.		
Architecture (5) Decorations, etc.	3.	Civil Eng. (6) Stereotomy.	4.	Civil Eng. (19) Trusses.	5.
Rhetoric (2) Expository Writing.	2.	Rhetoric (3) Brief-Making, etc.	2.	Rhetoric (3) Brief-Making, etc.	2.

FOURTH YEAR.

Architecture (18) Designing.	4.	Architecture (4) Specifications.	2.	Architecture (6) Estimates and Supt.	4.
Civil Eng. (15) Masonry.	5.	Architecture (7) Heating, Vent, etc.	5.	Architecture (19) Designing.	4.
Mech. Eng. (23) Materials of Const.	4.	Architecture (8) Designing.	5.	Architecture (20) Thesis.	5.
Geology (2) General.	5.	Geology (6) Economic.	3.	Civil Eng. (21) Surveying.	3.
		Drawing (18) Color Work.	3.	Drawing (19) Color Work.	2.

THESIS

OUTLINE OF THE COURSE IN CERAMICS

The ceramic industries include, according to the classification here adopted, those industries in which the production and utilization of natural and artificial silicates is the end in view, viz., clayware, glass and cement. These three industries constitute a natural division of chemical technology and though they are intimately connected with the field of the metallurgist on the one hand, and with the manufacturing chemist on the other, still they have an individuality which makes their study and exploitation as a separate field of industrial science advisable.

In this course chemistry forms an important part of the training, beginning with the first term and continuing through three years of purely chemical work, followed by a year of practice in the application of chemistry to ceramic operations. The student is also given training in mineralogy, geology, both historic and economic, metallurgy, so far as it pertains to fuels and iron, and mine engineering. Finally, the course includes a vigorous drill in mathematics, physics, mechanics, strength of materials, drawing, drafting, shopwork and construction. At least one year of some modern language, preferably German, and two years in English are required.

Also, like the metallurgist, the ceramist deals with reagents and performs chemical reactions on a gigantic scale; and in the winning of the materials, their mechanical preparation, their economic handling and storage, their manufacture into useful forms, and in the construction of buildings, machinery, kilns and furnaces for these purposes, the knowledge and resources of the trained engineer must constantly re-enforce those of the chemist and geologist.

FIRST YEAR.

NOTE — The figure in parenthesis following the name of each study indicates the number of that study in its department. A full description of department work follows this statement of Courses.

(See page 141)

SECOND YEAR.

FIRST TERM.	Credit hours	SECOND TERM.	Credit hours	THIRD TERM.	Credit hours
Drawing (3) Projections.	3.	Drawing (3) Descriptive Geometry.	3.	Drawing (3) Shades, Shaows.	3.
Mathematics (41) Calculus.	5.	Mathematics (42) Calculus.	5.	Mathematics (43) Calculus.	5.
Physics (2) Mechanics, Heat.	3.	Physics (2) Electricity, Magnetism.	3.	Physics (2) Light, Sound.	3.
Physics (3) Problems.	2.	Physics (3) Problems.	2.	Physics (3) Problems.	2.
Ceramics (1) Laboratory.	5.	Ceramics (2) Laboratory.	5.	Ceramics (3) Laboratory.	5.
Drill and Gymnasium.		Drill and Gymnasium.		Military Drill.	

THIRD YEAR.

Mathematics (71) Statistics.	5.	Mathematics (72) Strength Mat'ls, Kinet's.	5.	Mathematics (73) Kinetics, Hydraulics.	5.
Ceramics (4) Raw Materials.	5.	Ceramics (5) Clay Products.	5.	Ceramics (6) Clay Products.	5.
Mine Eng. (4) Mine Surveying.	5.	Ceramics (7) Adv. Chem. Lab.	5.	Metallurgy (2) Mineralogy.	3.
Rhetoric (2) Expository Writing.	2.	Rhetoric (3) Brief-Making, etc.	2.	Rhetoric (3) Brief-Making, etc.	2.
				Shopwork (11) Forging.	3.

FOURTH YEAR.

First Term.	Credit hours	Second Term.	Credit hours	Third Term	Credit hours
Ceramics (9) Manf. of Bodies.	5.	Ceramics (10) Glasses and Glazes.	5.	Ceramics (11) Enamels, Colors.	5.
Metallurgy (4) Fuels and Iron.	5.	Ceramics (12) Cement.	5.	Ceramics (15) Thesis Work.	5.
Shopwork (4) Chipping and Filing.	3.	Ceramics (17) Ceramic Const.	4.	Mech. Eng. (25) Laboratory.	5.
Geology (2) General.	5.	Geology (6) Economic.	3.	Drawing (7) Photography.	2.
				THESIS	

OUTLINE OF THE COURSE IN CHEMICAL ENGINEERING

This course has been prepared to meet the growing demand for trained men in the numerous industries which are based upon chemical processes or employ them prominently in their work, and which are not included in the fields of metallurgy and ceramics.

The student begins his chemical work in the first year with general inorganic chemistry and qualitative analysis. This is followed in the second year by a course in quantitative analysis and a continuation of general chemistry; and in the third year by metallurgical analysis and organic chemistry. In the fourth year a course in industrial processes with laboratory work in inorganic preparations is required, together with a term's work in each in sanitary analysis of water and air, and in the elements of the ceramic industry, and two terms in physical chemistry. In addition to this, several options are offered in metallurgy, agricultural chemistry and mechanical engineering.

On the engineering side, mathematics is carried through three years; drawing, including free hand, mechanical and technical, is also required through three years. Physics is required in the first two years, mechanics in the third, and machine designing in the fourth. A term in the electrical laboratory forms a part of the fourth year's work.

Two years of English and a year of either French or German is required of all engineers. In view of the large chemical literature in the German language all students in the Chemical Course will find it almost necessary to select the German.

FIRST YEAR.

Note—The figure in parenthesis following the name of each study indicates the number of that study in its department. A full description of department work follows this statement of Courses.

(See page 141)

Shopwork Courses (7) 3 and (11) are to be taken in Summer Term, at the end of the First or Second Year.

SECOND YEAR.

First Term.	Credit hours	Second Term.	Credit hours	Third Term.	Credit hours
Chemistry (20) Quantitative.	4.	Chemistry (20) Quantitative.	4.	Chemistry (20) Quantitative.	4.
Chemistry (21) Inorganic.	2.	Chemistry (21) Inorganic.	2.	Chemistry (21) Inorganic.	2.
Physics (2) Mechanics, Heat.	3.	Physics (2) Elect'y, Magnetism.	3.	Physics (2) Light, Sound.	3.
Mathematics (41) Calculus.	5.	Mathematics (42) Calculus.	5.	Mathematics (43) Calculus.	5.
Drawing (3) Projections.	3.	Drawing (3) Descriptive Geom.	3.		
Chemistry (31) Stoichiometry.	2.			Metallurgy (2) Mineralogy.	3.
Drill and Gymnasium.		Drill and Gymnasium.		Military Drill.	

THIRD YEAR.

Chemistry (8) Organic.	5.	Chemistry (9) Organic.	5.	*Chemistry (9) Organic.	5.
Metallurgy (5) Laboratory.	5.	Metallurgy (6) Assaying.	5.	*Metallurgy (5) Laboratory.	5.
Rhetoric (2) Expository Writing.	2.	Rhetoric (3) Brief-Making, etc.	2.	Rhetoric (3) Brief-Making, etc.	2.
Mathematics (71) Statistics.	5.	Mathematics (72) Strength Mat'ls, Kinet's.	5.	Mathematics (73) Kinetics, Hydraulics.	5.
Drawing (21) Technical.	2.	Drawing (22) Technical.	2.	Drawing (23) Technical.	2.
				Mech. Eng. (32) Power Plants.	5.

* Students are to elect either Chemistry (9) 5, or Metallurgy (5) 5.

FOURTH YEAR.

Chemistry (32) Industrial.	4.	Chemistry (32) Industrial.	4.	Chemistry (15) Sanitary.	4.
Mech. Eng. (18) Machine Design.	5.	Mech. Eng. (18) Machine Design.	5.	Mech. Eng. (19) Machine Design.	5.
Elec. Eng. (6) Lectures.	2.	Chemistry (30) Physical.	3.	Chemistry (30) Physical.	3.
Elec. Eng. (7) Laboratory.	2.	*Mech. Eng. (35) Laboratory.	5.		
*Metallurgy (4) Fuels and Iron.	5.	*Metallurgy (4) General.	5.	Ceramics (16) General Principles.	5.
*Ag. Chemistry (4) Laboratory.	5.	*Ag. Chemistry (4) Laboratory.	5.		

* Students are to elect Metallurgy (4), two terms; Agricultural Chemistry (4), two terms or Metallurgy (4) first term, and Mechanical Engineering (35).

OUTLINE OF THE COURSE IN CIVIL ENGINEERING

The field of the civil engineer comprises mensuration or surveying and also construction in its broad sense.

As all the problems of the engineer involve the principles of the sciences, these form the ground-work of the course, and while mathematics is the foundation, occupying three years either alone or in its applications, physics, chemistry, geology and astronomy are each given an important place.

The technical work embraces instruction in free hand and mechanical drawing, surveying, and map-making, steel bridges and buildings, masonry structures, roads, streets, railways, water-supply, sanitary engineering, the testing of structural materials, and the fundamentals of steam and electrical machinery.

The drawing extends practically through the entire four years. It is designed to fit men to take responsible positions as draftsmen.

The work in surveying includes three terms' work in the text-book and field work on the campus. At the end of the second year, and again at the end of the third year, the surveying classes are taken into camp for four weeks in a rough country and devote their entire time to surveying. It is expected to fit young men for taking charge at once of a field engineering corps.

Two terms' work is required in steel construction, the first being devoted to the computation of stresses, and the second to the designing, detailing and drawing of roofs, bridges, buildings and other framed structures. The practice of the best bridge shops is followed. The term's work in masonry structure treats of building materials, abutments and piers, retaining walls, dams and masonry arches. Roads, street and railway construction and maintenance are treated at length in text books and lectures. A term is devoted to each of the subjects of water supply and sanitary engineering.

FIRST YEAR.

NOTE — The figure in parenthesis following the name of each study indicates the number of that study in its department. A full description of department work follows this statement of Courses.

(See page 141)

SECOND YEAR.

FIRST TERM.	Credit hours	SECOND TERM.	Credit hours	THIRD TERM.	Credit hours
Drawing (3) Projections.	3.	Drawing (3) Descriptive Geom.	5.	Drawing (3) Shades, Shadows.	3.
Mathematics (41) Calculus.	5.	Mathematics (42) Calculus.	5.	Mathematics (43) Calculus.	5.
Physics (2) Mechanics, Heat.	3.	Physics (2) Elect'y, Magnetism.	3.	Physics (2) Light, Sound.	3.
Civil Eng. (1) Land Surveying.	6.	Civil Eng. (4) Topog. Drawing.	4.	Civil Eng. (2) Railroad Surveying.	6.
Drill and Gymnasium.		Drill and Gymnasium.		Military Drill.	

SUMMER COURSE

Civil Engineering (22) 4 weeks, of 6 days per week. Field work in land and railroad surveying.

THIRD YEAR.

Mathematics (71) Statistics.	5.	Mathematics (72) Strength Mat'ls, Kinet's.	5.	Mathematics (73) Kinetics, Hydraulics.	5.
Civil Eng. (3) Topog. Surveying.	4.	Civil Eng. (24) C. E. Drawing.	5.	Civil Eng. (7) Bridge Stresses.	5.
Civil Eng. (16) Roads and Streets.	5.	Civil Eng. (6) Stereotomy.	4.	Drawing (7) Photography.	2.
Astronomy (2) Mathematical.	3.	Astronomy (2) Mathematical.	3.	Astronomy (2) Mathematical.	4.
Rhetoric (2) Expository Writing.	2.	Rhetoric (3) Brief-Making, etc.	2.	Rhetoric (3) Brief-Making, etc.	2.

SUMMER COURSE

Civil Engineering (23) 4 weeks, of 6 days per week. Field work in railroad and topographical surveying.

FOURTH YEAR.

First Term.	Credit hours	Second Term.	Credit hours	Third Term	Credit hours
Civil Eng. (8) Bridge Designing.	5.	*Civil Eng. (17) Railways.	5.	Civil Eng. (18) Water Supply.	5.
		*Civil Eng. (25) Adv. Bridge Work.	5.		
Civil Eng. (15) Masonry.	5.	Civil Eng. (14) Cement Testing.	2.	Civil Eng. (10) Sanitary Eng.	5.
Elec. Eng. (6) Lectures.	2.	Elec. Eng. (6) and (7) Lectures and Lab.	4.		
		Mech. Eng. (17) Laboratory.	3.	Mech. Eng. (25) Laboratory.	5.
Geology (2) General.	5.	Geology (6) Economic.	3.		

* Students are to elect either C. E. (17) or C. E. (25).

OUTLINE OF THE COURSE IN ELECTRICAL ENGINEERING

The object of this course is to give such training as shall enable the graduate successfully to take up practical work in those branches of engineering in which electricity plays the principal part. In general, the training needed for this purpose is the same as that of the Mechanical Engineer, except that the student need have only a general familiarity with other methods of power generation and utilization, and must make a thorough study of the subject of electricity. Consequently, the first two years of the two courses are alike, except as regards shopwork and physics.

A considerable part of the first two terms of the third year is occupied by a thorough training in elementary electrical engineering measurement, such as currents, voltage, capacity, inductance, magnetic flux, etc. This work is given in the physics department (see Physics, Course 6). The third year also includes training in mechanics, mechanism, machine design, and strength of materials, the latter taught both in the classes and in the laboratory. In the last term the study of steam machinery is commenced. Work on dynamo machinery is begun in the class-room in the second term, and followed up during the third term in the laboratory.

In the last year of the course, engines and boilers are studied during the first term in the class-room, and during both the first and second terms in the laboratory. Instruction in electrical engineering forms the main part of the work of this year. It is carried on in the class-room, drawing room, and laboratory, and includes besides a thorough course in alternating current machinery, courses on power transmission and upon the application of electricity. Throughout the whole of this year a part of the work is elective, and is chosen by the student subject to the approval of the head of the department. The end which is kept most in view, is the training of the student to think for himself, and to solve for himself the problems of the engineer.

Work in the class-room is done partly by text book and partly by lecture and recitation, preference being given to the former, where satisfactory books are available. The work is illustrated by the use of the projection lantern, diagrams and illustrative apparatus. Much stress is laid on the solution of numerical problems by the student. In the drawing room, designs are made of dynamo machinery of different kinds, transformers, house wiring, transmission, etc., the work here being as far as practicable based on the theoretical conclusions reached in the class and laboratory. The equipment is good and is increasing.

FIRST YEAR

NOTE — The figure in parenthesis following the name of each study indicates the number of that study in its department. A full description of department work follows this statement of Courses.

(See page 141)

SUMMER TERM.

Students are required to take *two* of the following Courses in Shopwork in the Summer Term at close of First Year: Shopwork (4), (7) and (11).

SECOND YEAR

FIRST TERM.	Credit hours	SECOND TERM.	Credit hours	THIRD TERM.	Credit hours
Drawing (3) Projections.	3.	Drawing (3) Descriptive Geom.	3.	Drawing (3) Shades, Shadows.	3.
Mathematics (41) Calculus.	5.	Mathematics (42) Calculus.	5.	Mathematics (43) Calculus.	5.
Physics (2) Mechanics, Heat.	3.	Physics (2) Elect'y, Magnetism.	3.	Physics (2) Light, Sound.	3.
Physics (3) Problems.	2.	Physics (3) Problems.	2.	Physics (3) Problems.	2.
Shopwork (*)	3.	Shopwork (13) Machine Work.	3.	Physics (5) Laboratory.	4.
Rhetoric (2) Expository Writing.	2.	Rhetoric (3) Brief-Making, etc.	2.	Rhetoric (3) Brief-Making, etc.	2.
Drill and Gymnasium.		Drill and Gymnasium.		Military Drill.	

* Students are required to take the Shopwork not assigned them in the Summer Time, i. e., Shopwork (4), (7) or (11).

THIRD YEAR

Mathematics (71) Statistics.	5.	Mathematics (72) Strength Mat'ls, Kinet's.	5.	Mathematics (73) Kinetics, Hydraulics.	5.
Physics (6) Laboratory.	5.	Physics (6) Laboratory.	5.	Mech. Eng. (32) Power Plants.	5.
Physics (4) Elect'y, Magnetism.	3.	Mech. Eng. (3) Mechanism.	5.	Mech. Eng. (28) Laboratory.	2.
Shopwork (14) Machine Work.	3.	Elec. Eng. (8) D. C. Machinery.	4.	Ind. Arts (7) Mach. Design.	3.
Drawing (5) Technical.	3.			Elec. Eng. (9) Laboratory.	4.

FOURTH YEAR

Elec. Eng. (10) A. C. Machinery.	3.	Elec. Eng. (10) A. C. Machinery.	3.	Elec. Eng. (13) Applications.	5.
Elec. Eng. (11) Laboratory.	3.	Elec. Eng. (14) Designing.	4.	Elec. Eng. (14) Designing.	4.
Mech. Eng. (33) Engines and Boilers.	5.	Elec. Eng. (11) Laboratory.	3.	Elec. Eng. (11) Laboratory.	3.
Mech. Eng. (29) Laboratory.	3.	Elec. Eng. (12) Transmission.	2.		
		Mech. Eng. (30) Laboratory.	2.		
*Elective	3-5.	*Elective	3-5.	*Elective	3-5.

THESIS

* Subject to the approval of the Professor of Electrical Engineering.

OUTLINE OF THE COURSE IN INDUSTRIAL ARTS

This course is designed for those who may desire to occupy positions in the various branches of manufacture, not as engineers, but as practical managers, superintendents or business men. A large amount of science training is given in the course, as also practice in the different shops and in drawing, besides studies of the principles and methods governing the production of the chief materials of construction, the different mechanical movements and their combination in machinery, the use of materials in various constructions, electrical machinery and steam power plants, together with laboratory practice; also the relations of capital and labor, the problems of trade, and the conduct of business enterprises.

Those unable to spend four years in this course will enter the short course requiring two years.

All choice of electives must be made in consultation with the head of the department and receive his approval.

FIRST YEAR

NOTE — The figure in parenthesis following the name of each study indicates the number of that study in its department. A full description of department work follows this statement of Courses.

(See page 141)

SECOND YEAR

First Term.	Credit hours	Second Term.	Credit hours	Third Term.	Credit hours
Drawing (2) Projections.	3.	Drawing (3) Descriptive Geom.	3.	Drawing (3) Shades, Shadows.	3.
Physics (2) Mechanics, Heat.	3.	Physics (2) Electricity, Magnetism.	3.	Physics (2) Light, Sound.	3.
Physics (3) Problems.	2.	Physics (3) Problems.	2.	Physics (3) Problems.	2.
Shopwork (7) Woodwork.	3.	Shopwork (9) Adv. Pattern Making.	3.	Shopwork (8) Cabinet Work.	3.
Shopwork (3) Foundry.	3.	Shopwork (11) Forging.	3.	Shopwork (12) Adv. Forging.	3.
Rhetoric (2) Expository Writing.	2.	Rhetoric (3) Brief-Making, etc.	2.	Rhetoric (3) Brief-Making, etc.	2.
Economics (2) Industrial Society.	2.	Economics (3) Indus. and Fin. Hist.	2.	Economics (4) Transportation Problems.	2.
Drill and Gymnasium.		Drill and Gymnasium.		Military Drill.	

THIRD YEAR

Drawing (5) Technical.	3.	Industrial Arts (2) Designing.	3.	Industrial Arts (2) Designing.	3.
Industrial Arts (1) Tools and Machines.	3.	Industrial Arts (1) Tools and Machines.	3.	Industrial Arts (1) Tools and Machines.	3.
Shopwork (4) Chipping and Filing.	3.	Shopwork (13) Machine Work.	3.	Shopwork (14) Machine Work.	3.
Metallurgy (4) Fuels and Iron.	5.	Metallurgy (4) Steel.	2.	Mech. Eng. (32) Power Plants.	5.
Economics (1) Elem. of Polit. Econ.	3.	Economics (1) Elem. of Polit. Econ.	3.	Economics (1) Elem. of Polit. Econ.	3.
		Mech. Eng. (22) Timber and Masonry.	3.		

FOURTH YEAR

First Term.	Credit hours	Second Term.	Credit hours	Third Term	Credit hours
Shopwork (15) Adv. Mach. Work.	3.	Shopwork (16) Adv. Mach. Work.	3.	Shopwork (17) Adv. Mach. Work.	3.
Elec. Eng. (6) Lectures.	2.	Elec. Eng. (6) Lectures.	2.	Civil Eng. (21) Surveying.	3.
Elec. Eng. (7) Laboratory.	2.	Elec. Eng. (7) Laboratory.	2.		
Industrial Arts (3) Shop Equipment.	3.	Industrial Arts (3) Shop Appliances.	3.	Industrial Arts (3) Shop Management.	3.
Industrial Arts (4) Adv. Designing.	3.	Industrial Arts (4) Adv. Designing.	3.	Industrial Arts (4) Adv. Designing.	3.
Mech. Eng. (28) Laboratory.	2.	Mech. Eng. (29) Laboratory.	2.	Mech. Eng. (30) Laboratory.	2.
Economics (5) Immigration, Money.	2.	Economics (6) Railroads, Crises, etc.	2.	Economics (7) Labor and Capital.	2.

THESIS

OUTLINE OF THE COURSE IN MANUAL TRAINING

This course is designed for those students who wish to become teachers of manual training in the public schools of secondary grade or in the technical schools.

As this course is a professional one, the studies found in it are those which will both broadly and specifically train for the end in view. There is a large amount of science work in physics and chemistry, which is of importance on account of its fundamental character and the preparation it gives for teaching those subjects. The shopwork of the different kinds will furnish the necessary knowledge and the training of the hand, eye and brain; the drawing will give familiarity with that mode of expressing ideas. The industrial arts treat of mechanical movements and their application to machine tools. Work in the subjects of electrical machinery and steam power plants is also included in order that the teacher may be capable of dealing with the power used in his shopwork. The studies in the educational field will present the principles underlying education and show the part which the different subjects have in the unfolding or development of the pupil.

All choice of elective work must be made in consultation with the head of the department and receive his approval.

FIRST YEAR

NOTE — The figure in parenthesis following the name of each study indicates the number of that study in its department. A full description of department work follows this statement of Courses.

(See page 141)

SECOND YEAR

First Term.	Credit hours	Second Term.	Credit hours	Third Term.	Credit hours
Drawing (3) Projections.	3.	Drawing (3) Descriptive Geom.	3.	Drawing (3) Shades, Shadows.	3.
Physics (2) Mechanics, Heat.	3.	Physics (2) Electricity, Magnetism.	3.	Physics (2) Light, Sound.	3.
Physics (3) Problems.	2.	Physics (3) Problems.	2.	Physics (3) Problems.	2.
Shopwork (7) Woodwork.	3.	Shopwork (9) Adv. Pattern Making.	3.	Shopwork (8) Cabinet Work.	3.
Shopwork (3) Foundry.	3.	Shopwork (11) Forging.	3.	Shopwork (12) Adv. Forging.	3.
Rhetoric (2) Expository Writing.	2.	Rhetoric (3) Brief-Making, etc.	2.	Rhetoric (3) Brief-Making, etc.	2.
Education (1) Elem. Physchology.	3.	Education (1) Elem. Psychology.	3.	Education (1) Elem. Psychology.	3.
Drill and Gymnasium.		Drill and Gymnasium.		Military Drill.	

THIRD YEAR

Drawing (5) Technical.	3.	Industrial Arts (2) Designing.	3.	Industrial Arts (2) Designing.	3.
Industrial Arts (1) Tools and Machines.	3.	Industrial Arts (1) Tools and Machines.	3.	Industrial Arts (1) Tools and Machines.	3.
Shopwork (4) Chipping, Filing.	3.	Shopwork (13) Machine Work.	3.	Shopwork (14) Machine Work.	3.
History (1) U. S. Political.	3.	History (1) U. S. Political.	3.	History (1) U. S. Political.	3.
*Chemistry (20) Quantitative.	4.	*Chemistry (20) Quantitative.	4.	*Chemistry (20) Quantitative.	4.
*Chemistry (21) Physical.	2.	*Chemistry (21) Physical.	2.	*Chemistry (21) Physical.	2.
*Physics (5) Laboratory.	5.	*Physics (5) Laboratory.	5.	*Physics (5) Laboratory.	5.

FOURTH YEAR

Shopwork (15) Adv. Mach. Work.	3.	Shopwork (16) Adv. Mach. Work.	3.	Mech. Eng. (32) Power Plants.	5.
Elec. Eng. (6) Lectures.	2.	Elec. Eng. (6) Lectures.	2.	Mech. Eng. (28) Laboratory.	2.
Elec. Eng. (7) Laboratory.	2.	Elec. Eng. (7) Laboratory.	2.		
Education (5) Science of Education.	3.	Education (5) Science of Education.	3.	Education (5) Science of Education.	3.
Polit. Science (1) Polit. Inst. of U. S.	3.				
Electives	2-5.	Electives	5-7.	Electives	5-7.
		THESIS			

* Students take either Chemistry (20) and (21) or Physics (5).

OUTLINE OF THE COURSE IN MECHANICAL ENGINEERING

The training given in this course is designed to equip men with such general and technical knowledge, that they can enter at once and with equal ease into positions in any of the numerous subdivisions of mechanical engineering, and adapting themselves to the needs of the situation, can rapidly acquire the experience which is essential to that particular work.

The technical work of the course begins with physics, which is taught by a year's text-book course, supplemented by two terms of laboratory work. This is followed in turn by mechanics, mechanism, the strength of materials, bridge stresses, machine design, thermodynamics, prime movers, steam boilers, shop appliances, hydraulic machinery, and the metallurgy of fuel, iron and steel.

Three laboratory courses are provided, in shopwork, drawing and experimental engineering, respectively. The shopwork course trains the student in those handicrafts in constant use in all mechanical industries, viz., forging, chipping and filing, carpentry, pattern-making, foundry work, and the use of the principal metal-working machine tools.

The course in drawing includes free hand drawing, lettering, projection, descriptive geometry, shades, shadows, perspective and technical drawing, all leading up to the three terms of machine design which teach the student to use this drawing as one of the important tools of his profession.

The experimental engineering, coming in the last year of the course, gives the student opportunity to gain familiarity with boiler tests, determinations of the efficiency of steam power-plants, gas engines, hydraulic and refrigerating machinery, measurements of friction, losses of power in transmission, and many other important technical problems, and is of the greatest use to the student in enabling him to face practical work with confidence in himself.

FIRST YEAR

NOTE — The figure in parenthesis following the name of each study indicates the number of that study in its department. A full description of department work follows this statement of Courses.

(See page 141)

SUMMER COURSE

Students are required to take *two* of the following Courses in Shopwork in the Summer Term at the close of the First Year: Shopwork (4), (7) and (11).

SECOND YEAR

First Term.	Credit hours	Second Term.	Credit hours	Third Term.	Credit hours
Drawing (3) Projections.	3.	Drawing (3) Descriptive Geom.	3.	Drawing (3) Shades, Shadows.	3.
Mathematics (41) Calculus.	5.	Mathematics (42) Calculus.	5.	Mathematics (43) Calculus.	5.
Physics (2) Mechanics, Heat.	3.	Physics (2) Electricity, Magnetism.	3.	Physics (2) Light, Sound.	2.
Shopwork (3) Foundry.	2.	Physics (7) Laboratory.	2.	Physics (7) Laboratory.	3.
Rhetoric (2) Expository Writing.	2.	Rhetoric (3) Brief-Making, etc.	2.	Rhetoric (3) Brief-Making, etc.	2.
Shopwork (*)	3.	Shopwork (*)	3.	Shopwork (13) Machine Work.	3.
Drill and Gymnasium.		Drill and Gymnasium.		Military Drill.	

* Students are required to pursue satisfactorily before the Third Term, Second Year, Shopwork Courses (4), (7), (9) and (11). In the First Term they will be assigned one of the two subjects not yet taken successfully, and in the Second Term the other; but Shopwork (7) must precede Shopwork (9).

THIRD YEAR

First Term.	Credit hours	Second Term.	Credit hours	Third Term	Credit hours
Mathematics (71) Statistics.	5.	Mathematics (72) Strength Mat'ls, Kinet's.	5.	Mathematics (73) Kinetics, Hydraulics.	5.
Mech. Eng. (12) Laboratory.	2.	Mech. Eng. (3) Mechanism.	5.	Mech. Eng. (3) Mechanism.	2.
Drawing (5) Technical.	3.	Mech. Eng. (22) Timber, Masonry.	3.	Drawing (7) Photography.	2.
Metallurgy (4) Fuels and Iron.	5.	Metallurgy (4) Steel.	2.	Civil Eng. (19) Trusses.	6.
Shopwork (14) Machine Work.	3.	Shopwork (15) Adv. Mach. Work.	4.	Mech. Eng. (32) Power Plants.	5.
Mathematics (11) Diff. Equations.	1.				

FOURTH YEAR

Mech. Eng. (33) Engines and Boilers.	5.	Mech. Eng. (34) Thermodynamics.	5.	Mech. Eng. (19) Machine Design.	5.
Mech. Eng. (27) Laboratory.	5.	Mech. Eng. (14) Laboratory.	4.	Mech. Eng. (15) Laboratory.	3.
Mech. Eng. (18) Machine Design.	5.	Mech. Eng. (18) Machine Design.	5.	Mech. Eng. (21) Thesis.	5.
Elec. Eng. (6) Lectures.	2.	Elec. Eng. (6) Lectures.	2.	Industrial Arts (5) Shop Appliances.	3.
Elec. Eng. (7) Laboratory.	2.	Elec. Eng. (7) Laboratory.	2.	Mech. Eng. (31) Hydraulic Machinery.	3.
		THESIS			

OUTLINE OF THE COURSE IN MINING ENGINEERING

The profession of mining engineering involves two distinct fields; that of the engineer, presented in the locating, exploiting and operating of mining properties, and that of the chemist and metallurgist in the reduction of ores and the treatment of fuels, as in coke manufacture. The course preparatory to this profession must include a thorough training in general science, especially chemistry, mathematics, mineralogy and geology, as well as in the use of English, and, as far as possible, foreign languages.

With this as a foundation there must be given special instruction in the arts which are related particularly to mining and metallurgy, and which usually furnish the first employment to the graduate, such as drafting, surveying, technical chemical analysis and assaying. Finally the advanced work of the profession must be fully treated. Such work naturally occupies the later years of the course, being necessarily preceded by the mathematics and the general science training. The course which follows has been framed on these general principles.

The third year is largely devoted to special professional studies. The work in metallurgy is extended and developed in special lectures on the metals, their properties and reduction, fuel, furnaces, refractory materials and the principles of slag formation and furnace charging. Fire assaying of gold, lead and silver ores is taught practically.

The engineering side of the course is developed in this year by training in the principles of construction, as given in mechanics, strength of materials and truss stresses. Surveying is taught by lectures, recitations and extended field practice.

In the fourth year of the course the problems of mine engineering and metallurgical constructions are developed in lectures covering the theory and practice of mine development and operation, furnace construction and design, etc., and are supplemented by practical work in the drafting room and by visits to accesible mines and metallurgical works for study and comparison.

FIRST YEAR

NOTE — The figure in parenthesis following the name of each study indicates the number of that study in its department. A full description of department work follows this statement of Courses.

(See page 141)

SECOND YEAR

FIRST TERM.	Credit hours	SECOND TERM.	Credit hours	THIRD TERM.	Credit hours
Drawing (3) Projections.	3.	Drawing (3) Descriptive Geom.	3.	Drawing (3) Shades, Shadows.	3.
Mathematics (41) Calculus.	5.	Mathematics (42) Calculus.	5.	Mathematics (43) Calculus.	5.
Physics (2) Mechanics, Heat.	3.	Physics (2) Electricity, Magnetism.	3.	Physics (2) Light, Sound.	3.
Metallurgy (5) Laboratory.	5.	Metallurgy (5) Laboratory.	5.	Metallurgy (5) Laboratory.	5.
Shopwork (7) Woodwork.	2.	Shopwork (11) Forging.	2.	Metallurgy (2) Mineralogy.	3.
Drill and Gymnasium.		Drill and Gymnasium.		Military Drill.	

THIRD YEAR

Mathematics (71) Statistics.	5.	Mathematics (72) Strength Mat'ls, Kinet's.	5.	Mathematics (73) Kinetics, Hydraulics.	5.
Metallurgy (4) Fuels and Iron.	5.	Metallurgy (4) General.	5.	Metallurgy (3) Deter. Mineralogy.	5.
Mine Eng. (4) Mine Surveying.	5.	Metallurgy (6) Assaying.	5.	Civil Eng. (19) Trusses.	5.
Rhetoric (2) Expository Writing.	2.	Rhetoric (3) Brief-Making, etc.	2.	Rhetoric (3) Brief-Making, etc.	2.
		Mine Eng. (7) Surveying.	1.		

FOURTH YEAR

Mine Eng. (5) Mine Engineering.	5.	Mine Eng. (5) Mine Engineering.	5.	Mine Eng. (5) Mine Engineering.	5.
Geology (2) General.	5.	Geology (6) Economic.	3.	Mech. Eng. (25) Laboratory.	5.
Metallurgy (8) Ore Dressing.	2.	Metallurgy (7) Metal. Construction.	3.	Mine Eng. (6) Plans and Specifications.	5.
Elec. Eng. (6) Lectures.	2.	Elec. Eng. (6) Lectures.	2.	Drawing (7) Photography.	2.
Elec. Eng. (7) Laboratory.	2.	Elec. Eng. (7) Laboratory.	2.		
		Geology (7) Petrography.	2.		

THESIS

COURSES NOT LEADING TO A DEGREE

The following short courses are offered by the University, in the belief that they will meet the needs of a large class of young men who for any reason will not or cannot obtain the benefits of the thorough courses already described. The University recognizes that there are many valid reasons which may stand in the way of some, whose ability to receive and use the highest forms of education is without question, and it is thought that in extending opportunities for such training as will be available to these young men, the University is filling a longfelt want in the scheme of engineering education and is certain to grow into closer contact with the industrial life of the State.

No diploma is given to those who complete these courses, but a certificate is issued stating the list of studies which the student has taken in his course, and in which his work has been satisfactory.

The requirements for admission to these short courses are very much lower than for admission to regular collegiate work. It is considered, however, that those who enter these courses are men, mature in character and steadfast in their purpose to gain sufficient technical education for their needs, and who are making a sacrifice of time at an age when time has begun to be precious. Every candidate for admission to the short courses, will be expected to satisfy the Committee on Entrance that his previous experience will enable him to utilize the opportunity thus afforded in a proper way.

REQUIREMENTS FOR ADMISSION TO THE SHORT COURSES

Applicants must not be less than seventeen years of age, and unless they are over twenty-one years of age must pass an examination in Arithmetic and Geography, and must be able to write a business letter or a short theme correct in Grammar and Orthography; or bring High School or other certificates for these branches.

Applicants who are over twenty-one years of age are admitted without examination.

OUTLINE OF THE SHORT COURSE IN CLAY-WORKING

The two-year or industrial course is designed to assist young men who have already been actively engaged in the Ceramic industries, and who, on account of mature years, or lack of means, or lack of previous educational advantages, are unable to avail themselves of the full and complete course, and yet who wish to increase their earning power or chances of promotion by fitting themselves for other than routine labor.

FIRST YEAR

NOTE — The figure in parenthesis following the name of each study indicates the number of that study in its department. A full description of department work follows this statement of Courses.

FIRST TERM.	Credit hours	SECOND TERM.	Credit hours	THIRD TERM.	Credit hours
Chemistry (3) Inorganic.	5.	Chemistry (3) Inorganic.	5.	Chemistry (12) Analytical.	5.
Physics (1) Elementary.	5.	Physics (1) Elementary.	5.	Geology (1) Phys. Geography.	5.
Mathematics (1) Algebra.	5.	Mathematics (3a) Geometry.	5.	Shopwork (11) Forging.	3.
				Shopwork (4) Chipping, Filing.	2.
Drill and Gymnasium.		Drill and Gymnasium.		Military Drill.	

SECOND YEAR

Ceramics (1) Chem. Analysis.	5.	Ceramics (2) Analysis of Clays.	5.	Ceramics (3) Analysis of Glazes.	5.
Ceramics (4) Raw Materials.	5.	Ceramics (5) Clay Products.	5.	Ceramics (6) Clay Products.	5.
Geology (2) General.	5.	Geology (6) Economic.	3.	Drawing (11) Mechanical.	5.
		Drawing (1) Freehand.	2.		
Drill and Gymnasium.		Drill and Gymnasium.		Military Drill.	

OUTLINE OF THE SHORT COURSE IN INDUSTRIAL ARTS

This course is primarily designed to extend the benefits of the same kind of training as that given in the four-year course in this subject to that class of young men who may be unable for any reason to undertake a course of four years' duration, but who engage actively in factory work. It has been the aim to give, in as condensed form as possible, those studies which will most rapidly and easily be turned to practical account in manufacturing operations; such as drawing, shopwork, use of machine tools, etc., together with a grounding in the physics, mathematics and mechanisms which underlie these operations.

The course will be found most valuable to young men already engaged in factory work, who find themselves limited from rising in their work on account of lack of technical education.

NOTE — The figure in parenthesis following the name of each study indicates the number of that study in its department. A full description of department work follows this statement of Courses.

FIRST YEAR

FIRST TERM.	Credit hours	SECOND TERM.	Credit hours	THIRD TERM.	Credit hours
Drawing (1) Freehand.	1.	Drawing (1) Freehand.	1.	Drawing (1) Freehand.	1.
Drawing (2) Lettering.	3.	Drawing (3) Projections.	3.	Drawing (4) Drafting.	3.
Mathematics (2) Algebra.	5.	Mathematics (2) Algebra.	5.	Mathematics (2) Algebra.	5.
Mathematics (3) Plane Geometry.	5.	Mathematics (13) Space Geometry.	5.	Mathematics (14) Trigonometry.	5.
Shopwork (7) Pattern Making.	3.	Shopwork (9) Adv. Pattern Making.	3.	Shopwork (11) Forging.	3.
Drill and Gymnasium.		Drill and Gymnasium.		Military Drill.	

SECOND YEAR

First Term.	Credit hours	Second Term.	Credit hours	Third Term	Credit hours
Industrial Arts (8) Machine Drawing.	3.	Drawing (3) Descriptive Geom.	3.	Drawing (3) Shades, Shadows.	3.
Industrial Arts (1) Tools, Machines.	3.	Industrial Arts (1) Tools, Machines.	3.	Industrial Arts (1) Tools, Machines.	3.
Physics (1) Elementary.	5.	Physics (1) Elementary.	5.	Geology (1) Phys. Geography.	5.
Shopwork (4) Chipping, Filing.	3.	Shopwork (13) Machine Work.	3.	Shopwork (14) Adv. Machine Work.	3.
Shopwork (3) Foundry.	2.	Industrial Arts (2) Designing.	3.	Industrial Arts (2) Designing.	3.
Drill and Gymnasium.		Drill and Gymnasium.		Military Drill.	

OUTLINE OF THE SHORT COURSE IN MINING

The short course in mining is especially designed for young men who have had practical experience in mines, and wish to study mine surveying, drafting, the problems of ventilation, drainage, haulage, mine operating, etc., and also something of the sciences bearing upon their work, but have neither the time nor preparation for a full college course. The first year is devoted to a thorough study of the elementary mathematics and sciences necessary to prepare the student for the practical work of the second year.

FIRST YEAR

NOTE — The figure in parenthesis following the name of each study indicates the number of that study in its department. A full description of department work follows this statement of Courses.

First Term.	Credit hours	Second Term.	Credit hours	Third Term.	Credit hours
Mathematics (2) Algebra.	5.	Mathematics (2) Algebra.	5.	Mathematics, (2) Algebra.	5.
Mathematics (3) Geometry.	5.	Mathematics (13) Geometry.	5.	Mathematics (14) Trigonometry.	5.
Physics (1) Elementary.	5.	Physics (1) Elementary.	5.	Geology (1) Phys. Geography.	5.
Drill and Gymnasium.		Drill and Gymnasium.		Military Drill.	

SECOND YEAR

Drawing (2) Lettering.	3.	Drawing (3) Projections.	3.	Drawing (4) Drafting.	3.
Drawing (1) Freehand.	2.	Geology (4) Elementary.	5.	Shopwork (11) Forging.	3.
Chemistry (3) Inorganic.	5.	Chemistry (3) Inorganic.	5.	Metallurgy (9) Mineral Chemistry.	5.
Mine Eng. (1) Mine Surveying.	5.	Mine Eng. (2) Ventilat. Haulage.	5.	Mine Eng. (3) Mine Operating.	5.
Drill and Gymnasium.		Drill and Gymnasium.		Military Drill.	

THE COLLEGE OF LAW

REQUIREMENTS FOR ADMISSION. (*)

Requirements for admission of students who are candidates for a degree, beginning with the class graduating in 1904:

1. *Arithmetic, Descriptive and Physical Geography, English Grammar, and United States History.*

2. *English Composition and English Classics.*— Each applicant will be tested as to his ability to write clear and correct English. The test will be the writing of several brief essays, of which one will be upon a subject drawn from the applicant's observation or experience, and the others upon topics requiring a knowledge of the following books, or equivalents: Shakespeare's *Merchant of Venice, Julius Caesar,* and *Macbeth* Milton's *Lycidas, Comus, L'Allegro,* and *Il Penserosa;* Burke's *Conciliation with the Colonies;* Macaulay's *Essays on Milton and Addison;* The Sir Roger de Coverly Papers in *The Spectator;* Goldsmith's *The Vicar of Wakefield* Coleridge's *The Ancient Mariner* Scott's *Ivanhoe;* Carlyle's *Essay on Burns* Tennyson's *The Princess;* Lowell's *The Vision of Sir Launfal;* George Eliot's *Silas Marner.*[2]

3. *Algebra* — Taylor's Academic or equivalent.

4. *Botany* — Kellerman's Elementary Botany and Spring Flora.

5. *Civil Government* — Fiske or Thorpe preferred.

6. *Geometry, Plane and Solid* — Venable, Wentworth or Wells.

7. *History* — Either Myers's General History or equivalent; or, if the teacher's training and the school library will warrant, Greek and Roman History on the topical method.

8. *Physics* — Carhart and Chute, Gage, Avery, or Appleton.

9. Any two of the following groups:

(*a*) *Latin* — Pronunciation (the Roman method); Grammar (an exact knowledge of the inflections is essential); Cæsar, the first four books of the *De Bellico Gallico;* Cicero, six orations, including *Pro Lege Manilia;* Virgil, the first six books of the Aeneid, with Prosody; Prose Composition, Daniell or Collar or Jones entire.

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* For requirements for admission to the second and third years of the College of Law see advanced standing, p. 64.

[1] An applicant for admission who may be somewhat in arrears in any given subject, will find opportunity to make up his work in the Columbus High Schools, which are fully accredited by the University.

[2] To meet the English requirement the schools should provide courses in composition-practice and courses in English classics extending side by side through the preparatory years.

In the courses in composition, pupils should be afforded regular and abundant practice in preparing narrative, descriptive, expository and argumentative themes, and should be familiarized with those principles of Rhetoric which are most helpful in composition, such as the principles of sentence-structure, outlining, paragraphing, and choice of words. Scott and Denney's Composition-Rhetoric is recommended as a guide. The study of specimens of bad English from a text-book is not recommended; in order to insure accuracy, a considerable amount of the written work of the pupils should be corrected by the teacher and revised and rewritten by the pupils themselves. Some of the composition-work may be based upon the reading prescribed above, but much of it should be based upon the observation and experience of the pupils.

In the course in English classics, pupils should read the prescribed books with sufficient care to become familiar with the plot, incidents, and characters of all of them and should also learn something of their authors and of their places in literary history. A few of these books, or portions of all of them, should be examined closely with reference to form, structure, method, language, and leading characteristics of style. The voluntary outside reading of additional books should be encouraged by the teacher. In connection with all of the reading it is recommended that the memorizing of notable passages of prose and poetry be required.

(*b*) *Greek* — Grammar (Goodwin's preferred) and Prose Composition; or the first 100 lessons of White's Beginner's Greek Book. Reading: The first four books of Xenophon's *Anabasis*. At least two years should be devoted to this work.

(*c*) *French* — The whole subject of the French Grammar. Applicants will be expected to read at sight easy French; and to translate correctly into French, simple English sentences. Two years ought to be given to this study, the first year being spent mainly on the Grammar with easy reading; the second devoted to reading good modern French, with grammatical analysis and exercises in writing. The texts read should be chiefly narrative and conversational prose; one or more prose comedies of the nineteenth (*not* the seventeenth) century should be included.

(*d*) *German* — Joynes-Meissner's or Thomas' Grammar is recommended. The essentials in these grammars should have been mastered thoroughly, *i. e.*, declensions of nouns and adjectives, pronouns, comparison of adjectives, prepositions, regular and irregular verbs and essentials of syntax. The following books or their equivalents must have been read (not less than 600 pages): Joynes' or Whitney's Reader; Hillern's *Hoeher als die Kirche* Riehl's *Der Fluch der Schoenheit*; Freytag's *Die Verloene Handschrift, Gerstaecker Irrfahrten.*

(*e*) While the preferred requirement is that each graduate shall offer any two of the foregoing languages, he will be permitted to offer any two of the following subjects as the equivalent of one language:

1. *Chemistry* — Williams's or Remsen's.
2. *Physiology* — Martin's (briefer course).
3. *English Literature* — Pancoast's Introduction to English Literature and an acquaintance with representative works in each period.
4. *English History* — Montgomery.

10. In addition to the foregoing requirements for admission to the work of the College, *each candidate for a degree* must submit satisfactory evidence that he has successfully pursued a course of study equivalent to the first two years of any course leading to a degree in the College of Arts, Philosophy and Science, of this University.

The following statement of the work done in the first two years of the College of Arts, Philosophy and Science of this University will serve as an illustration of the amount of work of college grade necessary for a degree. Equivalents for any subject will be accepted.

FIRST YEAR.

First Semester.	Credit hours.	Second Semester.	Credit hours.
Greek or German Xenophon.	4	Greek or German Herodotus, Homer.	4
Latin or French Cicero.	4	Latin or French Livy, Horace.	4
Mathematics. Algebra, Analytics, Calculus.	3	Mathematics Trigonometry, Analytics, Calculus.	3
Rhetoric Composition.	2½	Rhetoric Composition.	2½
One of the following (the choice being for the year):			
Botany	3	Botany	3
Botany Systematical and Physiological.	4	Zoology Comparative.	4
Chemistry Inorganic.	3	Chemistry Inorganic.	3
Physics Mechanics, Heat, etc.	3	Physics Electricity, Magnetism, etc.	3
Zoology Comparative Zoology.	3	Zoology Comparative Zoology.	3

SECOND YEAR.

First Semester.	Credit hours.	Second Semester.	Credit hours.
Greek or German Lysias.	4	Greek or German Homer, Plato.	4 4
History United States or Economics Elementary	4	Economics Elementary or History United States	4
Latin or French Horace, Pliny.	4	Latin or French Tacitus, Juvenal.	4
English Literature Introductory.	4	Rhetoric Analysis of Prose.	4

The candidate will be subject to examination in such work. Where this work has been done in a College or University of approved standing, the certificate of such college or university will be accepted as a substitute for such examination.

REQUIREMENTS FOR ADMISSION FOR STUDENTS NOT CANDIDATES FOR A DEGREE.

Beginning with the class that will finish in June, 1904, for students who are not candidates for a degree, the requirements for admission will be the same as the requirements for candidates for a degree. No work of college grade is required of students who are not candidates for a degree.

ADVANCED STANDING.

The requirements both for admission as candidate for a degree and for admission not as a candidate for a degree, have been raised to take effect first upon the class graduating in 1904. Admission to the First Year and Second Year of the College of Law in the fall of 1902 will be under the new requirements already given.*

Applicants for admission to the Second Year must also present satisfactory evidence of having completed the work of the First Year of the Course in Law or its equivalent.

Admission to the Third Year will be under the pre-existing requirements. These are as follows:

For class graduating in 1903, requirements for admission not as candidates for a degree:

To the Third Year — Applicants for admission to the Third Year must present satisfactory evidence (by teacher's certificate — High School, Academy or College diploma — or by examination) of having a good common school education, including United States History, Civil Goverment and a thorough training in *English Composition*. In addition to the above requirements applicants for admission to the Third Year must present satisfactory evidence of having completed the work of the First and Second Years of the Course in Law, or its equivalent.

Requirements for Admission as Candidates for a Degree — Students seeking a degree must, at the time of registration, present in addition to the requirements above mentioned, satisfactory evidence of having completed a course of study, the minimum requirement of which is as follows:

Arithmetic, Civil Government, Geography, Grammar, History of the United States, Physical Geography, Physiology, Rhetoric, Physics, (Gage or an equivalent), *Geometry, Algebra,* (Wentworth's elements or an equivalent); and, in addi-

* See Requirements for Admission, p. 118.

tion, the equivalent of 75 hours per week for one term of 12 weeks (a total of 900 hours) chosen from any five or more of the following subjects, one at least being a Science and two at least being in History or Political Science (unless the applicant is especially permitted to offer approved substitutes): *Botany, Chemistry, English Constitutional History, English History, English Literature, French, Geology, General History, German, Greek, Latin, Logic, Physics, Political Economy, Psychology, Surveying, Trigonometry, United States Constitutional History: provided*, that not less than 65 hours for twelve weeks (a total of 780 hours) of this work shall be of collegiate or university grade. Opportunity will be given for examination in any subject for admission as above indicated, or, if this last mentioned work has been done by the candidate in a College or University of good and approved standing, certificates of such institution will be accepted as a substitute for such examination.

SPECIAL STUDENTS.

Persons wishing a knowledge of legal principals *for business purposes only*, but not intending to apply for a degree or to take full course, may be admitted at any time as special students, and may avail themselves of such advantages of the College as they may deem expedient, subject in each case to the approval by the faculty of the work proposed to be undertaken. Their convenience will not be taken into consideration in arranging classes, and they must make satisfactory arrangements as to fees, hours of recitation, etc., with the Dean.

ADMISSION TO GRADUATE WORK.

The Graduate course is open to graduates having the degree of Bachelor of Laws (LL. B) from Colleges or Schools of Law requiring three years' study of law and having a course of study and requirements equivalent to the undergraduate course of study and requirements of this College. Graduates of any Colleges or Schools of Law, and attorneys-at-law who have been regularly admitted to practice law, may also be admitted to this course.

TIME OF ENTRANCE, ETC.

In order to obtain the full benefit of the arrangement and detail of the course of study, a student should enter at the beginning of the First Year and attend regularly until the completion of the Third Year.

Those who are unable to do this are earnestly advised to enter promptly at the beginning of the year, or if special work is desired in the second semester, at the beginning of such semester.

Those entering the middle of a semester are greatly retarded both by the amount of work actually in arrears and also by the fact that the presentation of advance work must be given on the assumption that work already passed is properly understood by the student.

ENTRANCE EXAMINATIONS.

The University is open on equal terms to both sexes.

The entrance examinations for 1902 will be held on Monday and Tuesday, June 16 and 17, and Monday, September 22. A part of the examinations may be taken in June and the remainder in September. Conditions incurred at the June examinations must be removed at the September examinations.

Applicants for admission to the College of Law must be at least eighteen years of age. Each must be provided with credentials of scholarship from his last instructor or from the last institution with which he has been connected, and with a certificate of good moral character.

There are three modes of admission to the University:

1. Certificates of the preparatory departments of Colleges of approved standing and of Normal Schools in Ohio, and of the State Board of School Examiners, are accepted, if found satisfactory, in lieu of examination for preparatory studies, under the following conditions:

Each certificate must contain a detailed statement of the studies pursued, the text books used, the amount of work done in each study, the amount of time devoted to it, the date of the examination, and the applicant's rank or standing in it. A copy of the course of study should accompany the certificate; and both should be sent to the University not later than the first of September. *The University cannot promise this recognition to those certificates presented during entrance* week.

Blank certificates will be furnished on application.

Applicants for admission who come from other Colleges or Universities are required to bring certificates of honorable dismissal.

Teachers' certificates (in force) will be accepted at their face value.

2. Diplomas and certificates of approved High Schools will be accepted in lieu of examination for preparatory studies only under the following conditions:

(a) The certificate must state in detail the studies pursued, the text-books used, the amount of work done in each study, the amount of time devoted to it, the date of the examination in it, and the rank or standing of the candidate in it.

(b) The certificate will be accepted for such studies only, or such part of each, as it shall show to have been satisfactorily accomplished.

(c) Every such certificate must be accompanied with a diploma showing that the candidate has completed the course of study in the school from which he comes. But the General Faculty may except from this condition schools whose work is known to be exceptionally good, provided the candidate has attended the school two full years.

3. No applicant for admission to the University will be accepted who is deficient or conditioned in required entrance work representing in the aggregate more than one daily recitation for a year. This rule does not apply to students not candidates for a degree. Work of collegiate grade may be made up at any time before the Friday preceding Commencement Day.

All other applicants are subject to examination on the groups of study mentioned above, under the heading of Requirements for Admission.

Full equivalents for the text-books named will be accepted.

APPLICATION FOR ADMISSION FOR DEGREES

At the time of registration all applicants should present their diplomas and certificates of work done. These certificates should state in detail the studies pursued, the text-books used, the amount of work done in each study, the amount of time devoted to it, the date of the examination, and the rank or standing of the candidate in it. A copy of the course of study must accompany the certificate in all cases. These statements should also be accompanied by information as to age, occupation, experience, and work done since leaving school. Blanks for application will be furnished on request made to the Dean.

THESIS

Each candidate for a degree is required to prepare and deposit with the Faculty, not later than the second Saturday before Commencement of the year of graduation, a thesis of not less than fifteen hundred nor more than five thousand words, exclusive of citations of authorities, upon some subject selected by himself with

the approval of the professor giving instruction in that division of law from which the subject is chosen.

The subject of every thesis, with the full name of its author or authors, together with the written approval of it by the head of the department within which it lies, must be filed with the president of the University, on the official blank provided for the purpose, not later than December 15 of the year in which the degree is sought.

All undergraduate theses shall be made on paper of uniform size, 8 1-2 by 11 inches, and of quality and weight equal to that of a sample in the president's office. Theses shall be typewritten or printed, neatly bound in black cloth, and shall be gilt-lettered on the first cover with the thesis title, name of author, degree sought, and year of graduation.

Completed theses must be submitted to the head of the department concerned, not later than the second Saturday before Commencement Day.

A copy of the thesis so prepared and accepted must be filed with the University not later than the Friday preceding Commencement Day.

ADMISSION TO THE BAR

The regular Supreme Court examination for admission to the Bar is held on the first Tuesday in June of each year. Students who have not regularly attended the full course of three years at this College, or who have not been examined here in all the subjects required in the undergraduate course, are required to pass this examination before they can receive the degree of Bachelor of Laws or the certificate mentioned below.

DEGREES

The degree of Bachelor of Laws (LL. B.) will be conferred on all who, being at least twenty-one years of age and having met the requirements necessary for entrance for a degree, pass satisfactorily the examinations at the close of the Senior year, after having done at least that year's work in the College of Law at the University, and having presented a thesis acceptable to the Faculty.

The degree of Master of Laws will be conferred upon any one who has received the degree of Bachelor of Laws at this University, or other University, or College, or School of Law requiring three years' study of law and having a course of study and requirements equivalent to the undergraduate course of study and requirements of this College, upon completing the studies of the Graduate year, and satisfactorily passing an examination therein, and presenting a satisfactory thesis, the subject of which has been chosen from the work included in the Graduate year.

CERTIFICATES OF WORK DONE

Those who have completed the studies of this College, but have not complied with the requirements for a degree, will be given an official certificate, showing the work done, and signed by the President of the Board of Trustees, the President of the University, and the Dean of the College of Law.

No distinction is made between the candidates for a degree and other regular students while in attendance at this college. The two classes of students do the same work, recite together, take the same examinations, are held to the same standards of work and stand on the same footing for admission to the bar.

The distinction between the two classes of students consists entirely in the two following respects:

First — The standard of admission for candidates for a degree is higher than that for those who are not candidates for a degree.

Second — Candidates for degrees who have fulfilled all the entrance requirements and have completed the course of study in a satisfactory manner receive

a diploma conferring a degree. Regular students, who are not candidates for a degree, receive under similar circumstances a formal certificate of the completion of the course.

SUGGESTIONS FOR PREPARATORY READING

In addition to the requirements for admission, it is earnestly recommended that every person who enters the College of Law shall first have a more thorough and careful preparation in English and American History than this College is now ready to require.

For such prospective students as are not able to study these subjects in a High School or Academy the following is suggested as an elementary course in History: Montgomery's English History, Fiske's or McMaster's or Johnson's United States History. In connection with these works, Civil Government, which is one of the required subjects, may be reviewed to great advantage.

Those who are able to pursue the subject further can derive profit from carefully looking up the various topics presented in the books above named, in any good encyclopedia. Bryce's American Commonwealth and Fiske's American Revolution and Critical Period of American History will prove of great value.

The remaining suggestions are made primarily to those who have been able to study English and American History to the degree already indicated, though in some cases the student may find it to his advantage to pursue these subjects further, even without the full preparation above indicated. All those who have a good High School education, including American and English History, and are not able to obtain the advantages of a regular course in American and English History in a College or University are urged to continue their course of study before entering the College of Law by studying at least one of the following works upon English Constitutional History:

Walter Bagehot's English Constitution; Montague's Elements of English Constitutional History; Taswell-Langmead's English Constitutional History (Ashworth's Edition); Medley's Student's Manual of English Constitutional History (Second Edition); and one of the following works on English History: Green's Short History of the English People; S. R. Gardiner's Student's History of England; Oman's History of England; Goldwin Smith's United Kingdom; and at least one of the following books upon United States Constitutional History: Woodrow Wilson's Congressional Government; Judson Landon's Constitutional History and Government of the United States.

For those wishing to pursue the study of American Political History further recommendation is difficult on account of the wealth of material.

Channing's Student History of the United States (new edition); Channing's United States of America; McLaughlin's History of the People of the United States; Goldwin Smith's Outline of the Political History of the United States are suggested.

Students are also strongly urged to read upon the subject of the Civil Law at least the forty-fourth chapter of Gibbon's Decline and Fall of the Roman Empire and Howe's Studies in the Civil Law.

Such students as have pursued the course here suggested as far as possible will find that the work done at the College of Law, especially in the first year, will be proportionately more profitable to themselves.

UNIVERSITY COURSES SUITABLE FOR COLLATERAL STUDY

Nothing here said is intended to imply that this course of reading and study, helpful as it will be, is in any sense a substitute for a course in these subjects in a College or University. All who can should obtain the benefits of a college education before studying law.

For such as cannot, we suggest the advantage of attending a law school which is like this in close and vital connection with a great University. Strong courses in History, Political Science and Economics are offered at this University, which are open without extra charge to students in the College of Law, as they may elect, subject to the requirements for admission to such departments.

The following Courses offered in the department of American History and Political Science will be found especially helpful to students in the College of Law:

History: — The general course in the political and constitutional history of the United States; an advanced course covering the Revolution, framing of the Constitution, and the formation and organization of the Government; an advanced course, covering Secession, Civil War and Reconstruction, 1850 to 1876.

Political Science: — The political institutions of the United States; the government of cities; public international law.

In English Political and Constitutional History the following course is of especial value:

Political and constitutional history of England from earliest times to the present. Lectures, text-books and assigned readings. Gardiner's *Student's History of England*. Three times a week for one year. Involves discussion of English legal history and institutions.

GENERAL UNIVERSITY COURSES

Further attention is called to the great advantage of attending this College of Law, as its close and vital connection with the University affords the means of a liberal, practical and technical education. Students who are disposed to work faithfully and who desire to fit themselves for any special line of work may, at the same time that they are acquiring a technical knowledge of the law, supplement their general education by joining University classes, in departments which they may elect, subject to the requirements for admission to such departments, without extra charge except for laboratory work. This work may be selected from the courses in Civil, Mine, Mechanical, and Electrical Engineering, from the courses in Anatomy and Physiology, Economic Geology, etc. To the average practitioner there will come ten questions involving the principles of surveying or engineering to one of the constitutional law or English history. Not a day passes in the litigation of the courts but that numerous questions of Anatomy, Physiology, Surveying or Engineering arise to be decided. Particular attention, therefore,, is called to the technical courses offered by the University, which will be open to those in the College of Law who are able to take them without interfering with the required law work. The following departments offer courses which will prove beneficial to those who have not had such training as would enable them to take more technical work: Botany, Physiology, Physics, Civil Engineering, Mine Engineering, Chemistry (Toxicology), Geology, Philosophy, English.

METHODS OF INSTRUCTION IN LAW

The instruction offered the undergraduates includes a course of study covering three years of nine months each. It requires at least fifteen hours of class work per week for each class, and embraces all the elementary and practical studies necessary for admission to the Bar.

The purpose of the college is to furnish such legal training as will fit students for practice in any part of the country; and to impart an accurate knowledge of the principles of the law and to illustrate the application of these principles to the practical affairs of life — to teach students both to know and to apply the law.

The methods of instruction pursued in this college combine the advantages of all approved systems, yet the *text-book and recitation* system is mainly employed. It is sought to direct the attention of the student to the acquisition of a thorough

knowledge of the fundamental principles of law and to aid him in gaining a clear and distinct apprehension of the outlines of each particular subject, taught and, ultimately, of the science of the law as a whole. As is well said by Professor Bascom (Introduction to Philosophy of English Literature), there are, in each department of knowledge, central facts and germinal principles. If we reach these early and well, the labors of acquisition are greatly lightened. They serve to explain to the mind, and to hold for the memory, those multitudinous minor facts which otherwise confuse the one and burden the other. The ground is thus outlined; we know where to look for particulars; and these, as they come to us by direct search, or as incidents of growing knowledge, fall at once into their place and strengthen our general hold of truth.

This object, it is thought, is best attained by the method of instruction distinctly known as the text-book and recitation system. In this method of instruction, the students in each class are required to provide themselves with the text-books prescribed; portions of the text are assigned from day to day, for careful study as the basis of the recitation at the next meeting of the class, when each student's understanding of the principles involved is thoroughly tested by questions; Misapprehensions and errors corrected before they become fixed in his mind; ambiguous and obscure statements in the text explained, discussed and illustrated; and such further assistance to a full and proper understanding of the subject afforded by the instructor as he may be able to render. The discussions and expositions are informal and are so conducted as to relieve the student from embarrassment, strengthen his grasp of the subject, quicken his perception and develop his reasoning powers. During these recitations the students are not only permitted, but are invited and encouraged to ask questions pertinent to the matter under consideration; which questions are then carefully and fully answered by the instructor or deferred for further consideration, investigation and research by the students and the instructor. Few formal lectures are delivered, but the instructor seeks to get as near the student as may be in his effort to gain a clear conception of the subject in hand; and, both by exposition of the text and familiar conversational discussions, to remove his doubts and perplexities. And further to assist the student in his efforts to master the principles of law, and to illustrate their application, in practice, to the affairs of life, he is referred to, and required carefully to study, leading and well-considered cases in the Reports of the American and English courts.

It will be observed that the students in the First Year class are engaged, during the First Semester, exclusively with Elementary Law, using Blackstone and two American works topically. The entire field of study is thus carefully outlined and the minds of the students thoroughly imbued with the general principles and prepared for the more elaborate expositions of the various subjects which follow in the course of study prescribed.

A recitation is one hour in length and the work in the College is so arranged that each class will have an average of at least three recitations each day.

UNDERGRADUATE COURSE OF STUDY IN LAW

FIRST YEAR

	Recitation hours per week
FIRST SEMESTER.	
Elementary Law (including Domectic Relations, Status and Personal Property)	15
	15

	Recitation hours per week
SECOND SEMESTER.	
Agency	2
Contracts	4
Criminal Law	3
Sales	2
Torts	4
	15

Text-Books

First Semester — Elementary Law (Robinson, Walker, Tenth edition) and Blackstone and Tiffany's Persons and Domestic Relations.

Second Semester — Agency (Mechem); Contracts — Criminal Law (Hawley); Sales (Tiedeman); Torts (Cooley).

SECOND YEAR

	Recitation hours per week
FIRST SEMESTER.	
Bailments	2
Commercial Law	5
Evidence	3
Pleading	4
Moot Court	1
	15
SECOND SEMESTER.	
Evidence	3
Partnership	2
Pleading	2
Real Property	5
Wills	2
Moot Court	1
	15

Text-Books

First Semester — Bailments (Hale); Commercial Law (Tiedman); Evidence (Greenleaf, Sixteenth edition); Pleading (Phillips and Kinkead's Selections).

Second Semester — Partnership ((Mechem); Real Property (Tiedeman); Wills (Page).

THIRD YEAR

FIRST SEMESTER.	
International Law } Constitutional Law }	4
Corporations (Private)	2
Corporations (Municipal)	2
Equity Jurisprudence	4
Probate Law	2
Moot Court	1
	15
SECOND SEMESTER.	
Corporations (Private)	2
Ethics	2
Federal Practice	2
Mortgages } Suretyship }	2
Quasi-Contracts	2
Trial Practice	2
Moot Court	1
	13

Thesis for graduation to count for two hours through second semester.

Text Books

First Semester — Constitutional Law (Black); Private Corporations (Taylor); Municipal Corporations (Tiedeman); Equity Jurisprudence (Merwin); Probate Law (Kinkead).

Second Semester — Ethics (Sharswood); Quasi-Contracts, Suretyship (Baylies); Trial Practice (Kinkead).

GRADUATE COURSE OF STUDY IN LAW

FIRST GROUP

General and Comparative Jurisprudence

1. General Jurisprudence. Holland and Particular Topics. One hour a week, first semester.
2. Comparative Jurisprudence. Roman Law; Outlines. Two hours a week, first semester.

   History of the Common Law, Pollock & Maitland. Three hours a week, second semester.

SECOND GROUP

English and American Constitutional History.

3. English Constitutional History. Three hours a week throughout the year.
4. American Constitutional History. Three hours a week throughout the year.

THIRD GROUP

Political Science

5. Public International Law.
6. History of Treaties and Modern Diplomacy. Courses six and five, each two hours a week throughout the year.
7. American Diplomatic History. Three hours a week, one term (12 hours).

FOURTH GROUP

American Jurisprudence

8. Private Corporations. Two hours a week, first semester.
9. Railroad Law. One hour a week, second semester.
10. Law of Receivers. One hour a week, second semester.
11. Insurance. One hour a week, first semester.
12. Negligence and Damages. Cases, and Jones on Negligence of Municipal Corporations. One hour a week throughout the year.
13. Cases in Evidence. Thayer. One hour a week throughout the year.
14. Cases in Equity. One hour a week throughout the year.
15. Remedies and Remedial Rights, including Drafting Pleadings and other legal papers; preparation for trial; and Moot Court. One hour a week throughout the year.
16. Real Property, advanced studies, including examinations of titles and making of abstracts of title. One hour a week, second semester.
17. Circuit and Supreme Court Practice, and Special Proceedings under the Ohio Code of Civil Procedure. One hour a week, second semester.

The graduate course may be completed in one or two years, according to the desire of the student, with the permission of the Faculty of this College; but at least one year of residence is required.

Subject to the approval of the Faculty, each graduate student must select a major course of study from some one of the groups of subjects specified in the graduate course of study above given, and a sufficient number of minor courses to satisfy the requirements o fthe Faculty.

The major course must occupy at least three hours a week throughout the year, and the minor courses must occupy at least seven hours a week throughout the year.

Graduate students are permitted to select their minor courses from the undergraduate course of study, by permission of the Faculty.

ADVANTAGES

LOCATION

Attention is called to Columbus as a place in which to study law. Here the Legislature meets; here are the Supreme Court, Circuit Court and four branches of the Common Pleas Court, in almost daily session throughout the college year; the Probate Court, the County Commissioners, the City Court and the several Magistrates' Courts; also the U. S. Court and District Courts. All are easy of access from the College.

LIBRARIES.

The following libraries are accessible to the student:

The Law Library of the College contains the Noble Law Library, the Emerson McMillin Law Library, the Critchfield Law Library, four sets of the Ohio and the Ohio State Reports, and many other leading reports; in all, about 3,000 well selected volumes.

The University Library contains 40,000 volumes of very carefully selected books upon all subjects. This is quite complete in the more recent standard works upon history and political science, philosophy, etc. A good collection of the leading scientific, technical and literary magazines and journals is to be found here.

The State Law Library, of about 35,000 volumes, is the largest and most complete Law Library in the State. It contains complete sets of the English, Scotch, Irish, Canadian, United States, and State Reports, Statutes and Digests, as well as all the important text-books and leading periodicals published. This library is located in the new State Supreme Court building.

The State Library, in the State House, is a library of general literature, history, science, biography, political and social science, philosophy, etc., comprising some 65,000 volumes. The leading magazines, journals, etc., are also to be found here.

The University Libraries are open from 7:30 A. M. to 9:30 P. M. during the five days in which the University is in session, and on Saturdays from 8 A. M. to 4 P. M. The State Lay Library is open six days in the week, from about 8:30 A. M. to 5:30 P. M., with the exception of about an hour and a half at noon. The State Library is open six days in the week from 9 A. M. to 12 M., and from 2 P. M. to 5 P. M.; and when the Legislature is in session, from 7 P. M. to 9 P. M.

The City Library, with 30,000 volumes and a fine reading room, may also be used by students, under reasonable restrictions.

EXPENSES

Each undergraduate student of the University is required to pay an incidental fee of fifteen dollars a year, and in this College a tuition fee of forty-five dollars; a total of thirty dollars for each semester, which is payable at the beginning of each semester.

The fees for graduate students are as follows: The incidental fee is $15 per annum, and the tuition fee is $45 for the Course, payable $30 at the beginning of each semester; when two years are taken to complete the course, the incidental fee for the second year is payable at the beginning of the second year.

A fee of five dollars (to cover the expenses of graduation, diplomas, etc.,) is charged to all who take the degree of Bachelor of Laws, and a fee of ten dollars is charged to those taking the degree of Master of Laws. These fees must be paid before the degrees are conferred.

Good boarding and lodging, convenient to the University, can be obtained at from $3.50 to $5.00 per week.

The text-books used in this College can be obtained at the University at students' prices. The University has no interest in these books or the sale of them, and they are permitted to be sold there merly for the convenience of the students.

APPROXIMATE COST OF BOOKS

The books for the first year	$43 50
For the second year	40 00
For the third year	36 00
Total for three years	$119 50

Please send names and addresses of law students and requests for printed matter to W. F. Hunter, Dean, 1032 Bryden Road, Columbus, Ohio, or to the Executive Office, Ohio State University, Columbus, Ohio.

SELF-SUPPORT

There is a large amount of work upon the University farm which is assigned to students, preference being given to those who are studying Agriculture. *But the University cannot promise work to all applicants.* Many students find work in private families, in offices, and in various occupations, by means of which they defray at least a portion of their expenses. A person of ability and energy, who is master of a trade, or who can do good work of any kind, can generally find remunerative employment. It has seldom been known that any student of ordinary energy and industry was obliged to leave the University because of a lack of money for necessary expenses, *after having been sixty days on the ground* — or long enough to inform himself as to the opportunities for securing employment.

Students should distinctly understand that where they attempt entire or partial self-support they should lengthen the term of study. An employment bureau is maintained at the University where the names of those seeking work and of those desiring workers are recorded. Students should report to the Executive Office from time to time as to their needs and their work. This will enable the authorities to be more helpful than otherwise would be possible.

PRIZES

The Edward Thompson Company offers annually to the student writing the best essay on a legal subject selected by the Faculty of the College of Law, the second edition of the American and English Encyclopedia of Law, which consists of about thirty volumes; and Professor Kinkead offers, as a second prize, his work on Pleading.

LAW LITERARY SOCIETY

The William F. Hunter Society, composed of students in the College of Law, meets every two weeks for quiz-work, moot-court practice, and practice in speaking and debating.

THE COLLEGE OF PHARMACY

COURSES OF STUDY

The College of Pharmacy offers two courses of study:

A four years' course leading to the degree of Bachelor of Science in Pharmacy (B. Sc.).

A two years' course (not leading to a degree) for which a certificate is granted.

The four years' course furnishes extensive and thorough training in Pharmacy, thus enabling the graduates to follow successfully any line of chemical or pharmaceutical work.

The short course is intended to train students for the general work of the dispensing pharmacist.

THE EXPERIENCE REQUIREMENT

The Ohio Board of Pharmacy requires as a condition of registration as Pharmacist four years of practical experience and for registration as Assistant Pharmacist two years of practical experience. The time spent in this college is accepted in full as applying on this requirement.

REQUIREMENTS FOR ADMISSION TO THE FOUR-YEAR COURSE

Applicants for admission to the College of Pharmacy must be at least sixteen years of age; and must present testimonials of good moral character from their last instructor, or institution with which they have been connected.

In addition to arithmetic, descriptive geography and English grammar, the following subjects are required. The units placed after each subject serve to indicate its relative value. The text-books preferred ar indicated, but their full equivalents will be accepted:

1. *Physical Geography.* One unit. Geike's Elementary Lessons.
2. *United States History.* One unit. McLaughlin's History of the American Nation.
3. *English Composition.* One unit. *English Classics.* One unit.

Each applicant will be tested as to his ability to write clear and correct English. The test will be the writing of several brief essays, of which one will be upon a subject drawn from the applicant's observation or experience, and the others upon topics requiring a knowledge of the following books, or equivalents: Shakespeare's *Merchant of Venice, Julius Caesar and Macbeth;* Milton's *Lycidas, Comus, L'Allegro, and Il Penseroso;* Burke's *Conciliation with the Colonies;* Macaulay's *Essays on Milton and Addison;* The Sir Roger de Coverly Papers in *The Spectator;* Goldsmith's *The Vicar of Wakefield;* Coleridge's *The Ancient Mariner;* Scott's *Ivanhoe;* Carlyle's *Essay on Burns;* Tennyson's *The Princess;* Lowell's *The Vision of Sir Launfal;* George Eliot's *Silas Marner.*[1]

[1] To meet the English requirements the schools should provide courses in composition-practice and courses in English clasics extending side by side through the preparatory years.

In the courses in composition, pupils should be afforded regular and abundant practice in preparing narrative, descripitve, expository and argumentative themes, and should be familiarized with those principles of Rhetoric which are most helpful in composition, such as the principles of sentence- structure, outlining, paragraphing, and choice of words. Scott and Denney's Composition-Rhetoric is recommended as a guide. The study of specimens of bad English from a text-book is not recommended. In order to insure accuracy, a considerable amount of the written work of the pupils should be corrected by the teacher and revised and rewritten by the pupils themselves. Some of the composition-work may be based upon the reading prescribed above, but much of it should be based upon the observation and experience of the pupils.

In the course in English classics, pupils should read the precribed books with sufficient car to become familiar with the plot, incidents, and characters of all of them and should also learn something of their authors and of their places in literary history. A few of these books, or portions of all of them, should be examined closely with reference to form, structure, method, language, and leading characteristics of style. The voluntary outside reading of additional books should be encouraged by the teacher. In connection with all of the reading it is recommended that the memorizing of notable passages of prose and poetry be required.

4. *Algebra.* Two units. Taylor's Academic Algebra.

5. *Plane Geometry.* One unit. *Solid Geometry.* One unit. Venable, White, Wentworth or Wells.

6. *Botany.* One unit. Kellerman's Elementary Botany and Spring Flora.

7. *Civil Government.* One unit. Fiske or Thorpe.

8. *General History.* One unit. Myer's.

9. *Physics.* Two units. Carhart and Chute, Gage, Avery or Appleton.

10. *Latin.* Three units.

Pronunciation (the Roman Method); Grammar (an exact knowledge of the inflections is essential); Caesar, the first four books of the *De Bello Gallico;*

Or *German.* Three units.

Joynes-Meissner's or Thomas' Grammar is recommended. The essentials in these grammars should have been mastered thoroughly, *i. e.*, declensions of nouns and adjectives, pronouns, comparison of adjectives, prepositions, regular and irregular verbs and essentials of syntax.

The following books or their equivalents must have been read (not less than 600 pages). Joyne's or Whitney's Reader; Hillen's Höher als die Kirche, Riehl's Der Fluch der Schönheit; Freytag. Die Verlorne Handschrift; Gerstäcker Irrfahrten.

For the present, the *German* required for admission may be begun at the University, but without University credits.

No applicants for admission to the University will be accepted who are deficient or conditioned in required entrance work representing in the aggregate more than three units. Entrance conditions may be made up, (1) by examination conducted only by the proper officers of this institution, in the subject or subjects in which the conditions are incurred; or (2) by the substitution of excess work in other approved subjects; or (3) by the substitution of other work of equivalent amount to be done in the University at such times and in such subjects as the Faculty of the college shall direct.

Students who have any entrance conditions outstanding at the beginning of their third year of residence at the University will not be allowed to register until such conditions have been removed.

ADMISSION TO SPECIAL STUDIES

(See page 64.)

ADMISSION TO ADVANCED STANDING

(See page 64.)

OUTLINE OF THE COURSE IN PHARMACY

The course is mainly compulsory, only a small amount of elective work being offered in the fourth year. The greatest amount of time is devoted to Chemistry and Pharmacy. The chemical work begins in the first year with elementary chemistry and qualitative analysis, following in the second year with quantitative analysis. A full year is then devoted to the important subject of organic chemistry. In the fourth year the student is given the opportunity to choose between a number of

courses, as sanitary analysis, metallurgical chemistry, agricultural chemistry and advanced special work. Toxicology is required. The work in Pharmacy proper does not begin until the second year of the course. An entire year is devoted to the study of the methods and preparations of the Pharmacopœia; another year to unofficial preparations, prescription practice and dispensing, and pharmaceutical assaying; the last year to a study of the alkaloids, the synthetic preparations, and to pharmaceutical chemistry.

On account of the large amount of chemical literature printed in German, this language is made compulsory.

The courses in Physics, Physiology and Botany are arranged to furnish the student with such training in these sciences as will have a practical bearing upon the work of a pharmacist.

As a requisite for graduation, each candidate must present an acceptable thesis, embodying the results of a special study. The subject of this study must lie within the field of Pharmacy, and must be announced to the President of the University (dependent upon the approval of the head of the department), not later than the beginning of the second term of the fourth year.

Completed theses must be submitted to the head of the department concerned not later than the second Saturday before Commencement Day. A copy of the thesis so prepared and accepted shall be filed with the University not later than the Friday preceding Commencement Day.

On the satisfactory completion of the course, the student is granted the degree of Bachelor of Science (B. Sc.) in Pharmacy.

FIRST YEAR

NOTE — The figure in parenthesis following the name of each study indicates the number of that study in its department. A full description of department work follows this statement of Courses.

FIRST TERM.	Credit hours	SECOND TERM.	Credit hours	THIRD TERM.	Credit hours
Chemistry (7) Inorganic.	5.	Chemistry (7) Inorganic.	5.	Chemistry (12) Qualitative Analysis.	4.
Latin (1) Pharmaceutical, or	4.	Latin (1) Pharmaceutical, or	4.	Latin (1) Pharmaceutical, or	4.
German (1) Elementary.	4.	German (1) Elementary.	4.	German (1) Elementary.	4.
Mathematics (31) College Algebra.	5.	Mathematics (32) Trigonometry.	5.	Mathematics (33) Plane Analytics.	5.
Rhetoric (1) and (2) Paragraph Writing.	2½.	Rhetoric (1) and (2) Theme Writing.	2½.	Rhetoric (1) and (2) Prose Analysis.	2½.
Cadet Service (men)		Cadet Service (men)		Cadet Service (men)	
Hygiene and Physical Training (women)		Hygiene and Physical Training (women)		Hygiene and Physical Training (women)	

SECOND YEAR

Botany (3) Systematic, Physiological.	4.	Botany (4) Medical.	2.	Chemistry (20) Quantitative Analysis.	4.
Chemistry (20) Quantitative Analysis.	4.	Chemistry (20) Quantitative Analysis.	4.	German (2) Scientific Reading.	2.
German (2) Scientific Reading.	2.	German (2) Scientific Reading.	2.	Pharmacy (8) Dispensatories, etc.	5.
Pharmacy (6) General Processes.	3.	Pharmacy (7) U. S. Pharmacopoeia.	5.	Physics (11) General Physics.	3.
Physics (11) General Physics.	3.	Physics (11) General Physics.	3.	Metallurgy (2) Mineralogy.	3.
Chemistry (21) Advanced Inorganic.	2.	Chemistry (21) Advanced Inorganic.	2.	Chemistry (21) Advance Inorganic.	2.
Cadet Service (men)		Cadet Service (men)		Cadet Service (men)	
Hygiene and Physical Training (women)		Hygiene and Physical Training (women)		Hygiene and Physical Training (women)	

THIRD YEAR

First Term.	Credit hours	Second Term.	Credit hours	Third Term	Credit hours
Pharmacy (9) General Processes.	5.	Pharmacy (10) Prescriptions.	5.	Pharmacy (11) Dispensatories, etc.	5.
Pharmacy (12) Materia Medica.	3.	Pharmacy (13) Materia Medica.	3.	Pharmacy (14) Mat. Medica and Thera.	3.
Physiology (1) Human Anatomy.	3.	Physiology (1) Physiology.	3.	Physiology (1) Physiology.	3.
		Physiology (8) Bacteriology.	2.	Physiology (5) Microscopy.	2.
General Chemistry (8) Organic.	5.	Gen'l Chemistry (9) Organic.	5.	Gen'l Chemistry (9) Organic.	5.

FOURTH YEAR

Geology (2) General.	5.	Geology (6) Economic.	3.	Gen'l Chemistry (11) Toxicology.	4.
Pharmacy (15) Assaying.	5.	Pharmacy (16) General.	5.	Pharmacy (17) General.	5.
-nesis.		Thesis.		Thesis.	

Elective, eight or, by special permission of the Professor of Pharmacy, nine hours through the year — five hours of which in either case must be chemistry.

ADMISSION TO THE SHORT COURSE IN PHARMACY

Candidates for admission who are less than twenty-one years of age, must be prepared in the common English branches. Teachers' certificates (in force), or credentials from approved schools, will be accepted in lieu of an examination.

OUTLINE OF THE SHORT COURSE IN PHARMACY

This course is arranged for students who wish to prepare themselves in as short a time as possible for the duties of the dispensing pharmacist. It is also possible for students to enter this course who cannot meet the entrance requirements of the long course. Students who complete the work satisfactorily will have no trouble in passing the examination given by the State Board of Pharmacy.

The greatest amount of time is devoted to Chemistry and Pharmacy, both of which are studied throughout the course. The student also acquires sufficient knowledge of Latin to enable him to understand pharmaceutical and medicinal terms. Physics, Physiology and Botany receive due attention.

On the satisfactory completion of this coure the student is granted a certificate of "Pharmaceutical Chemist."

FIRST YEAR

Note — The figure in parenthesis following the name of each study indicates the number of that study in its department. A full description of department work follows this statement of Courses.

First Term.	Credit hours	Second Term.	Credit hours	Third Term	Credit hours
Chemistry (3) Inorganic.	5.	Chemistry (3) Inorganic.	5.	Botany (1) Elementary.	5.
Latin (1) Pharmaceutical.	4.	Latin (1) Pharmaceutical.	4.	Chemistry (12) Qualitative Analysis.	4.
Physics (1) Elementary.	5.	Physics (1) Elementary.	5.	Latin (1) Pharmaceutical.	4.
Pharmacy (6) General Processes.	3.	Pharmacy (7) U. S. Pharmacopoeia.	5.	Pharmacy (8) Dispensatories, etc.	5.
Cadet Service (men)		Cadet Service (men)		Cadet Service (men)	
Hygiene and Physical Training (women)		Hygiene and Physical Training (women)		H--ene and Physical Training (women)	

SECOND YEAR

First Term.	Credit hours	Second Term.	Credit hours	Third Term	Credit hours
Pharmacy (12) Materia Medica.	3.	Pharmacy (13) Materia Medica.	3.	Pharmacy (14) Mat. Medica and Thera.	3.
Chemistry (8) Organic.	5.	Chemistry (22) Organic.	5.	Chemistry (11) Toxicology.	4.
Pharmacy (9) Phar. Chemistry	5.	Pharmacy (10) Prescription Practice.	5.	Pharmacy (11) Dispensing Practice.	5.
				Physiology (1) Physiology.	3.
Physiology (1) Human Anatomy.	3.	Physiology (1) Physiology.	3.	Physiology (5) Microscopy.	2.
		Physiology (8) Bacteriology.	2.		
Cadet Service (men) Hygiene and Physical Training (women)		Cadet Service (men) Hygiene and Physical Training (women)		Cadet Service (men) Hygiene and Physical Training (women)	

THE COLLEGE OF VETERINARY MEDICINE

COURSES OF STUDY

The College of Veterinary Medicine offers a three-year graded course of study leading to the degree of Doctor of Veterinary Medicine, or to th certificate of Veterinary Surgeon, according to the thoroughness of the requirements for admission.

Applicants for the doctorate degree are required to complete the prescribed course of study, and show evidence of proficiency in arithmetic, grammar, descriptive and physical geography, English composition and rhetoric, U. S. history, Latin or German (one year), physics and the elements of Botany before the degree of Doctor of Veterinary Medicine will be conferred upon them.

Applicants for the certificate of Veterinary Surgeon (which is not a degree) are required to complete the prescribed course of study, and show evidence of proficiency in arithmetic, geography and grammar before they are granted said certificate of Veterinary Surgeon.

REQUIREMENTS FOR ADMISSION

The following are the requirements:

Applicants for admission to the College of Veterinary Medicine must be at least seventeen years of age.

The following are the requirements:

I. For applicants for certificates of Veterinary Surgeon: *Arithmetic*, *Geography* and *Grammar*.

II. For applicants who intend to become candidates for the degree of Doctor of Veterinary Medicine:

1. *Arithmetic*, *Grammar*, *and Descriptive and Physical Geography*.

2. *English Composition and Rhetoric* — Each applicant will be tested as to his ability to write clear and correct English. The test will be the writing of two essays of about two hundred words each. The first essay will be upon a subject drawn from the candidate's observation or experience. The second essay will be upon a subject drawn from a list of classics which will be furnished on application.

3. *History* — History of the United States, Johnson preferred.
4. *Latin or German* — One year.
5. *Physics* — Gage, Carhart and Chute, Avery, or Appleton.
6. *Botany* — Kellerman's Elementary Botany and Spring Flora or equivalent.

An applicant for admission who may be somewhat in arrears in any given subject, will find opportunity to make up this work in the Columbus High Schools, which are fully accredited by the University.

OUTLINE OF THE COURSE IN VETERINARY MEDICINE

The course of instruction extends over three years of nine month each. Thorough instruction in *Veterinary Dentistry, Meat Inspection, Bacteriology* and *Practical Operative Surgery* are included in the curriculum.

For class-room work a large number of paper models, wet and dry specimens from the museum, sample horse-shoes, charts, diagrams and drawings, surgical instruments and apparatus are constantly employed to supplement text-book teaching in all classes.

As far as possible the recitation plan of instruction, supplemented by clinical demonstration, is adhered to by the teachers of this college.

It is the endeavor to make the course of study as broad and exhaustive as is consistent with the time (three years) available, and to touch upon all those branches which underlie a thorough veterinary education.

FIRST YEAR

NOTE — The figure in parenthesis following the name of each study indicates the number of that study in its department. A full description of department work follows this statement of Courses.

FIRST TERM.	Credit hours	SECOND TERM.	Credit hours	THIRD TERM	Credit hours
Agr'l Chemistry (1) Principles.	5.	Agr'l Chemistry (8) Organic.	5.	Physiology (1) Physiology.	3.
Physiology (1) Histology.	5.	Physiology (1) Physiology.	3.	Physiology (4) Phys. Chemistry.	5.
Veterinary Medicine (11) Anatomy.	10.	Physiology (4) Histology.	5.	Veterinary Medicine (13) Anatomy.	10.
		Veterinary Medicine (12) Anatomy.	10.	Physiology (6) Bacteriology.	3.
Cadet Service.		Cadet Service.		Cadet Service.	

SECOND YEAR

Physiology (1) Physiology.	3.	Pharmacy (13) Materia Medica.	5.	Pharmacy (18) Laboratory.	5.
Pharmacy (12) Materia Medica.	5.	Veterinary Medicine (15) Theory and Practice.	5.	Veterinary Medicine (16) Theory and Practice.	5.
Veterinary Medicine (14) General Pathology.	5.	Veterinary Medicine (18) Surgical Diseases.	3.	Veterinary Medicine (18) Surgical Diseases.	3.
Veterinary Medicine (19) Clinic.	3.	Veterinary Medicine (19) Clinic.	3.	Veterinary Medicine (19) Clinic.	3.
Veterinary Medicine (24) General Surgery.	2.	Veterinary Medicine (34) Pathology Laboratory.	3.	Veterinary Medicine (34) Pathology Laboratory.	3.
Veterinary Medicine (37) Anatomy.	5.				
Cadet Service.		Cadet Service.		Cadet Service.	

THIRD YEAR

First Term.	Credit hours	Second Term.	Credit hours	Third Term	Credit hours
Veterinary Medicine (21) Theory and Practice.	5.	Veterinary Medicine (25) Practice in Operating.	3.	Veterinary Medicine (22) Therapeutics.	3.
Veterinary Medicine (19) Clinic.	3.	Veterinary Medicine (19) Clinic.	3.	Veterinary Medicine (19) Clinic.	3.
Veterinary Medicine (18) Surgical Diseases.	3.	Veterinary Medicine (27) Meat Inspection.	3.	Veterinary Medicine (23) Obstetrics.	5.
Agriculture (18) Milk Inspection.	1.	Veterinary Medicine (31) Canine Diseases.	5.	Veterinary Medicine (18) Surgical Diseases.	3.
Veterinary Medicine (26) Horse Shoeing.	3.	Agriculture (40) Zootechny.	5.	Veterinary Medicine (33) Opthalmology.	2.
Veterinary Medicine (36) Pathology Laboratory.	3.				

Departments of the University

Departments of the University

1902-1903

NOTE — The subjects taught in the Department of the University are indexed at the close of this volume.

DEPARTMENT OF AGRICULTURE

[Townshend Hall]

This department is located in Townshend Hall, headquarters for the College of Agriculture and Domestic Science, which was completed in 1898 at a cost of $100,000. This agricultural building is named after that illustrious pioneer in "education for agriculture", the late Dr. N. S. Townshend, who for twenty-five years was Professor of Agriculture in the Ohio State University. Townshend Hall is 260 feet long, and varies in width from 64 to 78 feet. It contains two stories, and a basement which is fourteen feet high, making the building practically three stories high. It contains well-lighted offices, class rooms, laboratories, the dairy department and the agricultural museum. The agricultural museum contains many of the latest patterns of farm machinery, including self-binders and mowers from all the leading manufacturers. In the study of soils, the large glass house with its equipment of railroad tracks, trucks and pots affords opportunity for the student to test the adaptability of crops to various soils, etc. The soil physics laboratory is supplied with apparatus for testing soils for agricultural purposes.

In the study of crops, large use is made of the collection of dried specimens of grasses, grains and seeds. The grass garden contains about twenty-five varieties of grasses and clovers, growing side by side where comparisons may be made as to the value of each for pasture, meadow and grass. The farm is visited frequently by students who make observations and studies of the practical methods there employed in the growing of crops and in the feeding and management of live stock. The live stock judging room is supplied with implements for precise measurement of animals and with score cards of all the different types of domestic animals. The students are here given opportunity to study every detail of conformation. The animals used are selected from the University farm or are contributed from time to time by the breeders of the State. The class-room is provided with a stereoptican and a large collection of carefully selected lantern slides of the leading individuals of several breeds of live stock. The herd books of the several breeds are made use of in familiarzing the students in methods of tracing pedigrees and the practices of breeders' associations.

The dairy laboratory has one of the finest equipment in the country, and contains a dozen different styles and sizes of cream separators, half a dozen styles of churns and butter workers, a number of hand-power and steam turbine milk-testers, an equipment for pasteurizing and bottling milk and cream and a cheese department fully equipped. In an adjoining power house are found a boiler, two engines, pumps, and refrigerating machinery, which are operated by students under the direction of an instructor.

I. ZOOTECHNY AND RURAL ECONOMICS

PROFESSOR HUNT, PROFESSOR PLUMB, MR. RUHLEN

28. **BREEDS OF LIVE STOCK.** Lectures and recitations upon the history, characteristics, adaptation, care and management of the different breeds of domestic animals. Practicum Wednesday afternoon (1) in scoring and judging live stock. Credit four and one-half hours. M., Th., F. at 11.

29. **BREEDS OF LIVE STOCK.** Lectures and recitations upon the history, characteristics, adaptation, care and mangement of the different breeds of domestic animals. Practicum Wednesday afternoon in scoring and judging live stock. Credit four and one-half hours. Second term. M., Tu., W. at 8.

30. **PRINCIPLES OF BREEDING.** Lectures and recitations upon the laws of heredity and their practical applications. Practicum Wednesday afternoon in scoring and judging live stock. Credit four and one-half hours. Third term. M., Tu., W. at 8.

31. **STOCK FEEDING.** Lectures and recitations upon the laws of nutrition, the character of food stuffs, and the methods of feeding different kinds of domestic animals. Considerable practice is given in caculating digestibilities, nutritive ratios, and feeding standards. Credit four hours. First term. M., Tu., Th., F. at 10.

32. **HYGIENE AND MANAGEMENT.** Lectures and recitations upon the principles of hygiene and their application to the management of domestic animals. Credit four hours. Second term. M., Tu., Th., F. at 10.

8. **BREEDS OF LIVE STOCK.** Lectures and recitations upon the history, characteristics, adaptation, care and management of the different breeds of domestic animals. Practicum Friday afternoon in scoring and judging live stock. Credit four and one-half hours. First term. M., Tu., W. at 8.

9. **PRINCIPLES OF BREEDING.** Lectures and recitations upon the laws of heredity and their practical applications. Practicum Friday afternoon in scoring and judging live stock, and in writing and tracing pedigrees. Credit four and one-half hours. Second term. M., Tu., W. at 11.

10. **STOCK FEEDING AND HYGIENE.** Lectures and recitations upon the laws of nutrition, the character of food stuffs, the relation of the food to the animals, and the kind and quantity of food to produce given effects. Practicum Friday afternoon in calculating digestibilities, nutritive ratios and feeding standards. Credit four and one-half hours. Third term. M., Tu., W. at 11.

14. **ANIMAL MECHANICS AND EXTERIOR.** Lectures and recitations upon animal mechanics, proportions, and the relation of the latter to specific uses. Practicum Thursday afternoon in measuring animals and testing the value of given measurements for given purposes. Credit four and one-half hours. First term. M., Tu., W. at 9.

26. **STOCK JUDGING AND MANAGEMENT.** Lectures and recitations. Practicum Thursday aftenoon. Credit three and one-half hours. Second term. M., Tu. at 10.

16. **HISTORY OF AGRICULTURE AND RURAL ECONOMICS.** Lectures and recitations upon the history of agriculture; present agricultural methods in various countries; cost and relative profits of various farm operations and systems. Credit four hours. Third term. M., Tu., Th., F. at 11

5. **DAIRY FARMING.** Lectures upon breeds, and upon feeding, breeding and selecting dairy stock; equipment and management of dairy farms. Practicum Saturday, third and fourth hours, in scoring and judging live stock, writing pedigrees and calculating feeding standards. Credit three hours. Second term. Th., F. at 10.

II. AGRONOMY AND FARM EQUIPMENT.

PROFESSOR HUNT, MR. MILLER

11. **FARM EQUIPMENT.** Lectures and recitations upon selecting, planning and equipping farms; planning and erecting farm buildings and fences; building roads; farm vehicles and machinery; power, water and drainage. Practicum Thursday or Friday afternoon in drawing plans of farms and farm buildings; leveling and laying drains; dynamometer tests of wagons and farm implements. Credit four and one-half hours. First term. M., Tu., W. at 9.

12. **SOILS.** Lectures and recitations upon the origin, formation, kinds and physical properties of soils and their improvements by cultivation, fertilzation, drainage and irrigation. Practicum Thursday or Friday afternoon or Saturday morning in laboratory testing physical properties of several soils; determining the relation of soils to heat, moisture, air and fertilizers, and making mechanical analyses. Credit four and one-half hours. Second term. M., Tu., W. at 9.

13. **FARM CROPS.** Lectures and recitations upon the history, production, marketing, cultivation, and harvesting of farm crops. Practicum Thursday or Friday afternoon with growing and dried specimens of crops, including grasses, clovers and other forage crops. Credit four and one-half hours. Third term. M., Tu., W. at 9.

19. **AGRONOMY.** Lectures and recitations on the physical properties of soils; the relation of soils to heat, air and moisture; the effect of fertilizers on soil structure and fertility; consideration of practical methods of tillage as affecting crop-producing power of the soil. Credit four hours. First term F. at 9. Laboratory and field experiments Monday and Tuesday afternoons.

This course must be preceded by course 12.

20. **AGRONOMY.** Lectures and recitations on: (a) the effect of climate, soil, and markets on the distribution and adaptation of farm crops in the United States; (b) The best method of crop production including a careful study of the details of field experimentation as set forth in experiment station bulletins and reports and the publications of the United States Department of Agriculture; (c) The consumption of farm crops. Credit four hours. Second term. F. at 9. Practicum Monday and Tuesday afternoons.

This course must be preceded by course 13.

21. **RURAL ENGINEERING.** Lectures and recitations on : (a) Laying out the farm, including location of buildings and works; division of the farm into fields and yards, and the survey and measurement of the same; (b) Construction of buildings and works, including water supply, drains, sewerage system, and roads; (c) The construction and use of farm machinery, including the application of mechanical principles in its structure and operation. Special attention will be given to comparisons and tests of various makes and kinds of farm machinery. Credit four hours. Third term. F. at 9. Practicum Monday and Tuesday afternoons.

This course must be preceded by course 11.

III. DAIRYING

PROFESSOR DECKER, MR. HERRICK, MR. CROWNER

6. **BUTTER MAKING AND CHEESE MAKING.** Practice in testing milk as to purity, contents of butter fat; in the use and care of centrifugal separators of different makes and other creamery and dairy devices; and in the making of butter and cheese by the most improved methods. In a word, all the essential operations of the creamery, factory, and home dairy, are repeatedly performed under the guidance and direction of the instructors until efficiency is attained. Neither is the student allowed to do this work by rule of thumb. He is required to follow the milk from the time it enters the laboratory until the finished product leaves it, and to determine the points in the process where losses occur and the reasons therefor. Credit six hours. Second term. M., Tu., W., Th. afternoons.

7. **BUTTER MAKING AND CHEESE MAKING.** Lectures and recitations on methods of creaming; factors which control the thoroughness of separation, either by gravity or centrifugal force; explanations of the continuous separation of cream: of ripening cream and testing for acidity; on the philosophy and methods of churning; the effect of temperature, acidity and richness of cream on time and completeness of churning; on the salting, working, packing and marketing of butter; on the fermentation of milk as affecting cheese making; on the curd test for detecting gassy or bad flavored milk; on the rennet test; on the cutting, heating, milling, salting and pressing of the curd; on the curing and shipping of cheese; on the judging of butter and cheese and the pasteurization of milk. There are also lectures upon the construction, equipment and operation of creameries, cheese factories, dairies and milk depots. Each student is required to draw a plan of a dairy, a creamery or a cheese factory and prepare the estimate for the equipment of the same. Credit two hours. Second term M., Tu. at 9.

15. **BUTTER MAKING.** Credit four hours. Lecture F. and Sat. afternoons. Second term. W. at 11. Laboratory.

22. **ELEMENTS OF DAIRYING** Lecture. Laboratory work Friday and Saturday afternoons. Credit four hours. First term or third term.

25. **CHEESE MAKING.** Credit four hours. Lecture W. at 11. Laboratory work Friday and Saturday afternoons. Third term.

18. **MILK INSPECTION.** Credit one hour. Lecture or laboratory once a week. First term required in the course in Veterinary Medicine.

DEPARTMENT OF AGRICULTURAL CHEMISTRY

(Townshend Hall, Rooms 29, 30, 34 and 35.)

PROFESSOR WEBER, MR. VINSON, MR. HIRSCH

The rooms occupied by the Department of Agricultural Chemistry are situated on the second floor of Townshend Hall. The north end contains a large student laboratory with ninety-two desks. Each student is assigned a desk. Connected with this laboratory are a balance room, a room for organic analysis, a store room and a private laboratory.

The lecture room, capable of seating one hundred and fifty to two hundred students, with a preparation room adjoining, is situated in the south end.

There is also a room, detached from all other laboratories, fitted up for water analysis and polariscopic work in sugar analysis. Besides the usual desk outfit, students are supplied with all necessary apparatus for conducting their required work.

1. **PRINCIPLES OF CHEMISTRY AND CHEMICAL NOMENCLATURE.** Lectures and recitations on chemistry of non-metals, and laboratory practice. First three or four weeks of the term lectures and recitations will be substituted for laboratory practice. Credit four and one-half hours. First term. Lectures, M., W. at 9. Laboratory, either M. or Tu. afternoons and either W. afternoon or Th., 8-10 a. m., or F. 8-10 a. m.

8. **ORGANIC CHEMISTRY.** Lectures and recitations and laboratory practice. In connection with the lectures, Roscoe's Lessons in Elementary Chemistry or any other good text book on elementary chemistry is used. The laboratory work consists of a complete, systematic course in qualitative analysis. As a guide, Weber's Select Course in Qualitative Analysis is employed. Credit four and one-half hours. Second term. Lectures, M. W., at 9. Laboratory, either M. or Tu. afternoons, and either W. afternoon, Th., 8-10 a. m., or F., 8-10 a. m.

9. **APPLICATION OF CHEMISTRY TO AGRICULTURE.** Lectures and recitations and laboratory practice. In the third term, the lectures embrace the following topics: Ingredients of plants, organic and inorganic, essential and non-essential; sources of plant food, air and soil; nature of soil, mechanical portion, nutritive portion, assimilable and reserve plant food. At this point, the class is divided into two sections, the students of Agriculture continuing with soil exhaustion and amelioration; barnyard manure, its sources, composition and preservation; commercial fertilizers, their rational use and methods of determining the needs of soils; feeding stuffs and feeding rations. The students of Domestic Science are given for the remainder of the term a course of lectures on food adulteration illustrated with specimens obtained from the markets. The laboratory work of the third term begins with the quantitative analysis of simple salts as sodium sulphate and potassium chloride and continues with the analysis of limestones, soils, manures, feeding stuffs, and the short method of sanitary water analysis Credit six hours. The students of Domestic Science omit one laboratory period and omit the analysis of soils and manures. Credit four and one-half hours. Third term. Lectures, M., W., at 9. Laboratory, either M. and Tu. afternoons or W. and Th. afternoons and either Th., 8-10 a. m., or F., 8-10 a. m.

4. **LECTURES AND LABORATORY.** Lectures on the industries related to agriculture, as the manufacture of sugar from cane, sorghum and beets; the manufacture of starch, glucose, and dextrine; the nature and manufacture of vinegar, as fruit, malt and distilled vinegar; the manufacture of alcohol, malt liquors and wines. Laboratory practice in the official methods of analyzing fertilizer, feeding stuffs, milk, butter and cheese; the analysis of sugar, syrup and sugar producing plants, as beets; determination of cane sugar and milk sugar by means of the polariscope. The analysis of flour, fruits, vegetables, condiments, etc. The analysis of vinegar, as cider, malt and distilled vinegar; the analysis of spirituous and fermented liquors. Credit five hours. First second and third terms. Students of other departments may also elect three hours through the year in this course. Lecture, Tu., at 9, or F. at 8. Laboratory, M. and Tu. afternoons or Th. and F. afternoons, and Th., 8-10 a. m.

6. **LABORATORY.** Lectures and recitations Thursday, third hour, and laboratory practice Wednesday and Thursday afternoons. The work of this course consists of the complete sanitary analysis of water, for which a special room detached from the main laboratory has been fitted up; the complete analysis of soils; the various official methods of determining nitrogen,

potash and phosphoric acid; the analysis of oils and fats, complete analysis of grain; the analysis of tea and coffee; the examination of foods, syrups, spices, condiments, flavoring extracts for adulteration; also any work of previous courses, which for lack of time, may not have been completed. Credit four hours. First, second and third terms. May be elected as a three or five hour credit.

7. **CHEMISTRY OF MILK AND MILK TESTING.** Lectures and laboratory practice. For dairy students. The lectures include a short course in elements of chemistry. The laboratory work covers the following manipulations: The Babcock method of determining fat in pure milk, skimmed milk, cream, sour milk and cheese; the testing of instruments (milk bottles, lactometers, etc.). The calculation of the composition of milk by Fleischman and Babcock formulæ; the determination of preservatives in milk; the detection of artificial colors in butter and oleomargarine, etc. Credit four hours. Second term. Lectures, W. and Th., at 11. Laboratory, F. and Sat., 8–10 a. m.

DEPARTMENT OF AMERICAN HISTORY AND POLITICAL SCIENCE

I. AMERICAN HISTORY

(University Hall, Rooms 27, 18 and 48.)

PROFESSOR KNIGHT, ASSISTANT PROFESSOR SMITH, MR. RIGHTMIRE

The courses in American history are of four classes: (a) introductory (course 1), designed as a general foundation course in American political and social history; (b) intermediate (courses 2, 3, 4, 5, 6, 7, 14) designed to cover distinct periods or phases of American historical development; (c) advanced (courses 8, 9, 10, 12, 13) involving the deeper study of special subjects or movements, and designed to train and employ the student's faculty of investigation; and (d) a teachers' course of special character (course 11).

Course 1 must precede all other courses and should therefore as a rule be taken in either the first or second year. After this is completed students may elect at their pleasure from the courses in the intermediate group (courses 2, 3; 4, 5, 6; 7; 14), but it is desirable that election should be made for an entire year and not for single terms. Students who intend to go far with their studies in American history should take English history (European history 14) early in their course. American history 8 and 9 may be taken in connection with any of the above intermediate group but other courses of the advanced group are open only to fourth year and graduate students.

1. **POLITICAL HISTORY OF THE UNITED STATES.** A general course covering the political and social history from the earliest colonial times to the present. Text-books, prescribed readings and topical reports. Thwaite's The Colonies; Hart's Formation of the Union; Wilson's Division and Re-union. Three times a week throughout the year. Section I: M., W., F., at 8; Section II: M., W., F., at 9. Mr. Rightmire.

   This must precede all other courses in American history.

2. **AMERICAN COLONIAL HISTORY.** The political and social development of the American Colonies, the growth of colonial self-government and of the idea of union. Lectures, assigned readings and special reports. Three times a week, first and second terms. It is desirable that this course be preceded by European history 14. Professor Knight.

   [*Given biennially. Omitted in* 1902-1903].

3. **CONSTITUTIONAL AND POLITICAL HISTORY OF THE UNITED STATES.** The Formative Period, 1776–1800. An advanced course covering the organization and establishment of the United States as a separate government and nation. Lectures, assigned readings and special investigations. Three times a week, third term. Professor Knight.

[*Given biennially. Omitted in* 1902-1903].

4. **POLITICAL HISTORY OF SLAVERY IN THE UNITED STATES TO 1850.** A Study of the development of slavery in America and its relation to government, legislation and political organization until the Compromise of 1850. Lectures, assigned readings and special reports. Three times a week, first term. M., W., F., at 11. Professor Knight.

5. **SECESSION, CIVIL WAR AND RECONSTRUCTION, 1850-1876.** A study of the secession movement; the causes and effects of the downfall of slavery, and the reorganization of the States after the Civil War. Lectures and assigned readings. Three times a week, second term. M., W., F., at 11. Professor Knight.

Open to those who have had course 4.

6. **AMERICAN DIPLOMATIC HISTORY.** This course is an historical study of the foreign relations, problems and policy of the United States as shown in the principal negotiations and treaties from 1776 to 1900. Lectures and special investigations. Three times a week, third term. M., W., F., at 11. Professor Knight.

7. **HISTORY OF POLITICAL PARTIES, 1774-1900.** A detailed study of the origin, development and structure of political parties in the United States with particular attention to their social composition, geographical distribution, organization and political methods. First term, the Federalist and Republican parties, 1774–1820. Second term, Jacksonian Democracy, Whigs and Republicans, 1820–1860 Third term, the present parties. 1860–1900. Lectures, parallel readings, quizzes and reports. Three times a week throughout the year. M., W., F., at 2. Assistant Professor Smith.

8. **HISTORICAL MATERIAL AND ITS USE.** Lectures on elementary historical bibliography and the use of American historical documents, with practical exercises. Especially designed for students intending to do advanced work in American history and political institutions. Once a week, first and second terms. W., at 3. All students specializing in American history and political science should take this course, and the one following. Mr. Rightmire.

9. **TOPICAL RESEARCH IN AMERICAN HISTORY.** The preparation of special topics on the basis of the work of course 8. Once a week, third term. W., at 3. Mr. Rightmire.

Open to those who have had course 8.

10. **SEMINARY FOR RESEARCH WORK IN AMERICAN HISTORY AND POLITICAL SCIENCE.** Two hours (at one meeting), three terms. M., 3 to 5. Professor Knight and Assistant Professor Smith.

In 1902-1903 all four year students electing their major in American History and Political Science must take this course. Open as elective to other students, graduate and advanced under-graduate, on permission of the head of the department. In 1903 and thereafter open on permission of the head of the department to those who have had two courses in American history in addition to American history 8–9, and at least one course in political science.

11. **THE TEACHING OF AMERICAN HISTORY.** A course in methods of teaching American history, especially in the secondary schools, designed for advanced students preparing themselves as teachers and expecting to ask this department for recommendation as to their qualifications. Once a week, second and third terms. Tu., at 8. Professor Knight, Assistant Professor Smith.

12. **GRADUATE SEMINARY IN AMERICAN HISTORY AND INSTITUTIONS.** Some limited field will be made the subject of co-operative study each year by the seminary. So far as possible the investigation will be in the sources. The subject for 1902-1903 will probably be the Revolutionary Period. Two hours a week at one meeting, three terms. Hours to be arranged. Professor Knight.

Open only to graduate students.

13. **GRADUATE COURSES.** Under this number courses are arranged at the beginning of the year to meet the needs of individual students desiring to pursue graduate work in American history. Professor Knight.

14. **EXPANSION OF THE UNITED STATES, 1600-1900.** The westward extension and definition of the boundaries of the colonies and the United States, the spread of settlement, the formation of new states and the social and political results of this movement. Twice a week throughout the year. Assistant Professor Smith.

[*Omitted in* 1902-1903].

II. POLITICAL SCIENCE.

The work in policical science should be begun with course 1, but some other courses may be taken in connection with it. The order in which the other courses should be taken will vary according to the student's historical training. In all cases the work is closely dependent upon historical knowledge, the amount and kind varying for different courses. So far as possible a suggestion on this point is given below in connection with each course.

1. **MODERN POLITICAL INSTITUTIONS.** Introductory course in political science, comprising a study of the political and administrative systems of leading countries with particular reference to their actual operation. First term, the United States government and the state governments. Second term, England, France, Italy and countries with governments of the parliamentary form. Third term, German, Swiss and other federations. Lectures, quizzes, parallel reading and reports. Bryce, American Commonwealth, and A. L. Lowell, Government and Parties in Continental Europe cover the ground of this course. Woodrow Wilson, The State, is an alternative. Three times a week throughout the year. M., W., F., at 9. Assistant Professor Smith.

Prerequisite: American History 1 or European History 1 or 14.

4. **INTERNATIONAL LAW.** A study of public international law. Text book and lectures. Lawrence's Principles of International Law. Twice a week, first and second terms. Tu. and Th., at 10. Professor Knight.

Open to those who have had European History 1 or 14, or American History 1. After 1902-1903 open only to those who have had European History 1 and either American History 1 or European History 14.

5. **HISTORY OF TREATIES AND MODERN DIPLOMACY.** A study of the leading treaties of modern times, with special reference to their bearing on international law and the political relations of the leading nations. Lectures accompanied by collateral reading and special reports. Twice a week, third term. Tu., Th., at 10. Professor Knight.

Course 5 must be preceded by course 4, with which it forms a consecutive year's work.

6. **THE GOVERNMENT OF DEPENDENCIES.** A study of the government of dependencies by the home country, and of the political and legal relations between them. Lectures, assigned reading and special reports. Twice a week, first term. Tu., Th., at 11. Professor Knight.

7. **COLONIAL INSTITUTIONS.** A study of local institutions, civil service and administration, and the development of local self-government in the leading colonies of to-day. Lectures, assigned reading, and special reports. Twice a week, second term. Tu., Th., at 11. Professor Knight.

Course 7 must be preceded by course 6.

8. **MUNICIPAL GOVERNMENT.** A study of the development, status and government of modern municipalities, and a comparative study of recent American municipal charters. Lectures, collateral reading and special reports. Twice a week, third term. Tu., Th., at 11. Professor Knight.

9. **ORIGIN AND DEVELOPMENT OF THE UNITED STATES CONSTITUTION.** An historical study of the origin, in English, colonial, and state institutions, of the constitution, and its development by interpretation and exposition by the Supreme Court in selecting leading cases. Lectures, assigned reading, discussions and special reports. Twice a week, three terms. Mr. Rightmire.

[*Omitted in* 1902-1903].

10. **THEORIES OF GOVERNMENT, SOVEREIGNTY AND POLITICAL LIBERTY.** An introductory survey of the origins of political theories, followed by an historical study of the political doctrines expressed in American constitutions and a critical examination of these doctrines in the light of recent European and American thought. Lectures, reports and discussions. Twice a week throughout the year. Tu., Th., at 9. Assistant Professor Smith.

Open to graduates and qualified undergraduates who have obtained the instructor's permission.

12. **COMPARATIVE POLITICS.** A study of parties and political methods in legislation, administration and elections in the United States, Great Britain and its colonies, France, Germany, and the leading European countries. Lectures, quizzes, parallel reading and reports. Twice a week throughout the year. M., F., at 10. Assistant Professor Smith.

Open for the year 1902-3 to those who have taken two full years of work in European or American History.

After 1903 open only to those who have taken Political Science 1.

DEPARTMENT OF ANATOMY AND PHYSIOLOGY

[Biological Hall, Rooms 12, 17 and 20]

PROFESSOR BLEILE, ASSOCIATE PROFESSOR MORREY, MR. DRESBACH

The new quarters recently provided for this department are commodious, well lighted and ventilated.

The facilities provided for the study of anatomy, bacteriology, histology and physiology are excellent. The laboratory is supplied with skeletons, papier-mache manikin, and many models, including models of the eye, ear, larynx, etc. The apparatus of the department for work in bacteriology and physiology is of the

best and most approved construction, and is adapted to the accurate investigation of bacterial forms, as well as to the thorough performance of the fundamental physiological experiments. Myographs, spectroscopes, microscopes and the necessary chemical outfit are also provided. For work in histology the equipment includes twenty-four individual tables for student experiments, each table being supplied with a good microscope, microscopical accessories, microscopical reagents; and for advanced work, the needed apparatus for instruction in the various methods of hardening, staining, imbedding, section-cutting and injection. The laboratory also has excellent microtomes, imbedding baths and other essentials of a histological outfit. The equipment of the laboratory makes it possible to offer a large range of work for the choice of students in advanced courses.

1. **HUMAN ANATOMY AND PHYSIOLOGY.** Lectures, recitations and laboratory work three times a week. First, second and third terms. This course must be preceded or accompanied by a course in chemistry. Sec. 1, M., W., F., at 8. Associate Professor Morrey. Sec. 2, M., Th., F., at 10. Professor Bleile.

2. **GENERAL PHYSIOLOGY.** Lectures, recitations and demonstrations. Credit three hours. Third term. Tu., W., Th., at 8.

3. **CHEMICAL PHYSIOLOGY.** Three times a week. Third term. M., Tu., W., 1 to 4. Professor Bleile.

4. **HISTOLOGY AND HISTO-CHEMISTRY.** Credit five hours through the year. This course must be preceded by, or accompanied with, a course in chemistry. M., Tu., W., 1 to 4. Professor Bleile, Assistant Professor Morrey, Mr. Dresbach.

5. **MICROSCOPY AND URINARY ANALYSIS.** Lectures and laboratory work. Twice a week. Third term. Hours to be arranged. Professor Bleile, Associate Professor Morrey, Mr. Dresbach.

6. **BACTERIOLOGY.** Lectures and laboratory work on the general facts concerning bacteria and their relation to life processes followed by lectures on their special application to dairy and other agricultural industries. Credit two hours. Second term. M., at 9, and Tu., 9–11.

7. **BACTERIOLOGY.** Three times a week. Second term. M., F., at 10. Laboratory hours to be aranged. Associate Professor Morrey.

8. **BACTERIOLOGY.** One lecture, one laboratory period, a week. Second term. M., at 9. Laboratory hours to be arranged. Professor Bleile.

9. **PHYSIOLOGICAL LABORATORY.** Three times a week, three terms. Tu., at 9. Laboratory hours to be arranged. Professor Bleile.

10. **BACTERIOLOGY.** Lectures and laboratory work on the general facts concerning bacteria and their relation to life processes followed by lectures on their special application to cooking and other domestic affairs. Credit two hours. Third term. Tu., Th., at 9.

11. **PHYSIOLOGICAL LABORATORY.** Five times a week, three terms. Hours to be arranged. Professor Bleile.

12. **BACTERIOLOGY.** Twice a week, three terms. Hours to be arranged. Professor Bleile, Associate Professor Morrey.

13. **BACTERIOLOGY.** Three times a week, three terms. Hours to be arranged. Professor Bleile, Associate Professor Morrey and Mr. Dresbach.

DEPARTMENT OF ARCHITECTURE AND DRAWING

[Hayes Hall, Rooms 22, 23 and 24]

PROFESSOR BRADFORD, ASSOCIATE PROFESSOR FRENCH, MR. LEWIS, MR. MARTIN, MR. VOSSKUEHLER

The department occupies the entire third floor, one room on the second floor and one room in the basement of Hayes Hall, and is provided with the following equipment for the illustration of the work and for practical training in the same.

For Architecture: — A well lighted designing room, models in plaster and wood illustrating the constructive and ornamental forms of the different styles of architecture, a collection of architectural photographs and lantern slides, architectural drawing and specifications of erected structures, a collection of plates of architectural forms and ornament, samples of material used in constructive work, instruments for experimental work in heating and ventilating, such as anemometers, weather bureau hygrometers, carbonic acid testers and thermometers. The heating apparatus of the several buildings of the University provide valuable material for this work.

The many and varied achitectural structures, which are being continually erected in the city of Columbus and which the students can visit and inspect, furnish material of a practical nature, the value of which cannot be over-estimated. A lecture room provided with electric projection lantern enables the presentation of illustrative material for the different classes.

For Freehand Drawing, Water Color and Oil Painting: — A large studio, specially arranged and provided with adjustable tilting tables and easels; a well-selected collection of pencil, pen and ink, charcoal and color specimens of work, wooden models of geometric forms, plaster-casts of ornaments, flowers, fruit and the antique.

For Clay-modeling: — A specially arranged and equipped studio for modeling in clay and casting in plaster, consisting of modeling stands, moisture box, casting table, modeling tools of wood and steel, stove and went-hood for the preparation of gelatine molds, and lockers.

For Mechanical Drawing and Mechanical and Architectural Designing:—A large, well lighted room, provided with O. S. U. drawing tables (30" by 36" tops), a set of Schroeder models, a collection of shop drawings and facilities for blue-printing.

For Photography:—A well arranged and equipped dark-room, printing apparatus copying camera, eight view cameras, lenses of long and short focus, telephotographic lens, color screens, shutters for instantaneous exposures and an excellent outfit for photo-micrography.

In addition to the above the library contains a well selected collection of books pertaining to the work of the Department.

I. ARCHITECTURE

4. **SPECIFICATIONS.** Lectures and practice in preparing Specifications for Architectural Structures. Two credit hours. (Second term, fourth year, T. 11, W. 1-3. Course in Architecture.) Professor Bradford.

5. **DECORATION AND ORNAMENT.** Lectures on the different styles of carved ornament and decorative color. The practice part of this subject will be incorporated in the clay Modeling and Designing. Three credit hours. (First term, third year, M. W. 9; F. 9-11. Course in Architecture.) Professor Bradford.

6. **ESTIMATES AND SUPERINTENDENCE.** Lectures and practice in preparing estimates for structures designed in Courses 8, 11, 12 and 13, and the duties of superintendence. Four credit hours. (Third term, fourth year, M. W. 8; W. 1-5. Course in Architecture.) Professor Bradford.

7. **HEATING, VENTILATING AND PLUMBING.** Lectures and experimental work. Lectures on the principles and methods of heating and ventilating and of sanitary plumbing. Experimental work is carried on with the heating and ventilating plants in the different University buildings. Five credit hours. (Second term, fourth year, M. W. F. 8; M. Tu. 1–3. Course in Architecture.) Professor Bradford.

8. **DESIGNING.** Lectures and practice. Steel skeleton and fire proof construction. Five credit hours. (Second term, fourth year, Th. 11; Th. F. 1–5. Course in Architecture.) Professor Bradford.

9. **HISTORY OF ARCHITECTURE.** Lectures illustrated by lantern slides. Three credit hours. (First term, second year, M. W. F. 11. Course in Architecture.) Professor Bradford.

10. Continuation of 9. (Second term, second year, M. W. F. 11. Course in Architecture.) Professor Bradford.

11. Continuation of 10. (Third term, second year, M. W. F. 11. Course in Architecture.) Professor Bradford.

12. **ARCHITECTURAL DRAWING.** Drawing architectural ornament, details of orders and styles, with the special object of impressing upon the student's mind the architectural characteristics considered in Course 9. Two credit hours. (First term, second year, W. Th. 2-4. Course in Architecture.) Professor Bradford.

13. Continuation of 12. (Second term, second year, W. Th. 2–4. Course in Architecture.) Professor Bradford.

14. Continuation of 13. (Third term, second year, W. Th. 2–4. Course in Architecture.) Professor Bradford.

15. **DESIGNING.** Lectures and practice in designing structures adapted to modern requirements. Four credit hours. (First term, third year, W. Th. 1–4; F. 1-3. Course in Architecture.) Professor Bradford.

16. **DESIGNING.** Lectures and practice. Two credit hours. (Second term, third year, Th. F. 1–3. Course in Architecture.) Professor Bradford.

17. **DESIGNING.** Lectures and practice. Four credit hours. (Third term third year, W. Th. 1–4; F. 1–3. Course in Architecture.) Professor Bradford.

18. **DESIGNING.** Four credit hours. (First term, fourth year, Th. 10; W. Th. 1–4. Course in Architecture.) Professor Bradford.

19. **DESIGNING.** Four credit hours. (Third term, fourth year, Th. 11; Th. F. 1–4. Course in Architecture.) Professor Bradford.

20. **THESIS.** Original design, to be accompanied with written description, specifications and estimate. Five credit hours. (Third term, fourth year. Course in Architecture.) Professor Bradford.

II. DRAWING

1. **FREE HAND DRAWING.** Pencil, charcoal, pen and water-color drawing from copies, models and plaster casts. Practice and occasional lectures.
One credit hour. W. 1-3 or S. 8-10. (First, second and third terms, first year, Short Course in Industrial Arts.)

Two credit hours. (First term, second year, W. F. 8-10, Short Course in Mining; second term, second year, Th. F. 1-3. Short Course in Clayworking.)
Two credit hours. M. W. 8-10; M. Tu. 10-12; M. Tu. 1-3; M. F. 1-3; Th. F. 10-12; Th., F. 1-3; W., F. 8-10; W. 1-3; S. 8-10; or Tu., Th. 1-3. (First and second terms, first year of all four-year courses.) Mr. Lewis, Mr. Martin.

2. **LETTERING.** Practice and occasional lectures.
Three credit hours. Th. F. 1-4. (First term, first year, Short Course in Industrial Arts; second year, Short Course in Mining.) W. F. S. 8-10; W. F. 8-10, S. 10-12; M. 8-10, S, 8-12; M. W. 8-10, S. 10-12; M. Tu. 1-4; or W. F. 1-4. (Third term, first year, all four-year courses.) Associate Professor French, Mr. Vosskuehler.
This course must be preceded or accompanied by course 1.

3. **PROJECTIONS.** Orthographic, isometric and oblique projections, and elementary working drawing. Three credit hours. Must be preceded by Course 2. (First term, second year.)

LECTURES	PRACTICE	COURSES IN
M. 8.	Tu. Th. 9-11	Architecture.
W. 11	M. F. 10-12	Ceramics.
W. 11	M. F. 10-12	Chemical Engineering.
M. 8	Tu. Th. 9-11	Civil Engineering.
Th. 11	M. F. 10-12	Electrical Engineering.
W. 11	M. F. 10-12	Industrial Arts.
W. 11	M. F. 10-12	Manual Training.
W. 11	M. F. 10-12	Mech. Engineering.
Tu. 11	Tu. Th. 9-11	Mining Engineering.

(Second term, first year, Th. F. 1-4. Short Course in Industrial Arts; second year, Short Course in Mining). Associate Professor French, Mr. Vosskuehler.

3. **DESCRIPTIVE GEOMETRY.** Three credit hours. (Second term, second year.)

LECTURES	PRACTICE	COURSES IN
M. W. 11.	F. 10-12	Ceramics.
Tu. Th. 11.	F. 10-12	Chemical Engineering.
Tu. Th. 11.	F. 10-12	Electrical Engineering.
M. W. 11.	F. 10-12	Industrial Arts.
Tu. Th. 11.	F. 10-12	Manual Training.
M. W. 11.	F. 10-12	Mech. Engineering.
Tu. Th. 11.	Tu. 9-11; or F. 10-12.	Mining Engineering.
Tu. Th. 8.	Th. 9-11	Short Industrial Arts.

Associate Professor French, Mr. Vosskuehler.

3. **DESCRIPTIVE GEOMETRY.** Five credit hours. (Second term, second year, M. W. 8, Tu. Th. 8-11. Courses in Architecture and Civil Engineering.) Associate Professor French, Mr. Vosskuehler.

3. **SHADES, SHADOWS AND PERSPECTIVE.** Five credit hours. (Third term, second year, M. W. 8, Tu. Th. 8-11. Course in Architecture.)
Three credit hours. (Third term, second year.)

LECTURES	PRACTICE	COURSES IN
W. 11	M. F. 10-12	Ceramics.
Tu. 8	Tu. Th. 9-11	Civil Engineering.
Th. 11	M. F. 10-12	Electrical Engineering.
W. 11	M. F. 10-12	Industrial Arts.
W. 11	M. F. 10-12	Manual Training.
W. 11	M. F. 10-12	Mech. Engineering.
Tu. 11	Tu. Th. 9-11	Mining Engineering.
Tu. 8	Tu. Th. 9-11	Short Industrial Arts.

Associate Professor French, Mr. Vosskuehler.

4. **DRAUGHTING AND BLUE-PRINTING.** Practice and occasional lectures. Three credit hours. Th. F. 1-4. (Third term, first year, Short Course in Industrial Arts; and second year, Short Course in Mining.)

This course must be preceded by the first term of Course 3. Associate Professor French.

5. **TECHNICAL DRAWING.** Rules and methods for making working drawings in machine design, to represent correctly form and dimensions for shop use, and for tracing and blue-printing the same. Three credit hours. (First term, third year, Th. F. 1-4. Courses in Electrical and Mechanical Engineering, Industrial Arts and Manual Training.) This course must be preceded by Course 3. Associate Professor French.

7. **PHOTOGRAPHY.** Lectures: Optics of photography, chemistry of photography, exposing and developing, printing, lantern slides, orthochromatic photography and some of the application of photography. Practice: outdoor, interior, instantaneous and flashlight photography, copying, lantern slides and printing. Two credit hours. (First term, third year, M. Tu. 1-3. Course in Architecture; M. Tu. 1-3; or Th. F. 1-3, third term, third year, Courses in Civil and Mechanical Engineering; fourth year. Courses in Ceramics and Mining Engineering.) Professor Bradford.

10. **MECHANICAL DRAWING.** Lectures and practice Thursday and Friday afternoons. Elementary mechanical drawings, lettering and working drawings. Credit three hours. Second term. Associate Professor French.

11. **MECHANICAL DRAWING.** Lectures and practice. Five credit hours. (Third term, second year, W. 9, Th., F. 1-5. Course in Clay-Working.) Mr. Vosskuehler.

12. **CLAY MODELING.** Modeling in clay and casting in plaster ornamental forms from designs, photographs, nature and original designs. Two credit hours. (Second and third terms, third year, M. Tu. 1-3. Course in Architecture.) Mr. Lewis.

This course must be preceded by Course 1.

14. **PEN DRAWING.** Two credit hours. (First term, second year, M. Tu. 2-4. Course in Architecture.) Mr. Lewis.

This course must be preceded by Course 1.

15. **TECHNICAL DRAWING.** Lectures and practice Monday afternoon. House planning. This course must be preceded by Course 10. Credit one and one-half hours.

Second and third terms. Associate Professor French.

16. **TECHNICAL DRAWING.** Lectures and practice Monday and Tuesday afternoons. Designing, preparing working drawings and specifications for structures related to agriculture. This course must be preceded by Course 10. Credit three hours. Third term. Professor Bradford.

17. **ART.** Lectures on color standards, color theory, color harmony, color appearances, tone and graduation, atmosphere and values. Lectures illustrated by lantern slides. Practice in color work. First term. Two hours credit. Mr. Martin.

18. **ART. WATER AND OIL PAINTING.** Lectures on objects of art, ideas and subjects, style and individuality, schools of art, great artists, including old and modern masters. Illustrated by lantern slides. Practice in water or oil painting from still life. Second term. Two hours credit. Prerequisite, course 1. (Second term, fourth year. Course in Architecture. Tu., Th. 8 to 11. Mr. Martin.

19. **ART. WATER AND OIL PAINTING.** Lectures will be a continuation of second term's work and including sculpture and the master sculptors. Illustrated by lantern slides. Practice in water or oil painting from life and nature or clay modeling. Third term. The above is to be offered as an elective for two or three hours, as follows: Lectures for one hour and practice for two or four hours. Third term. Two hours credit. Must be preceded by course 18. Third term, fourth year. Course in Architecture.) Tu., Th., 8 to 10. Courses 17, 18, 19 constitute a continuous year's work. Prerequisite, course 1. Mr. Martin.

20. **MECHANICAL DRAWING.** Lectures and practice Monday afternoon. Elementary mechanical drawing and lettering. Credit one and one-half hours. First term. Mr. Vosskuehler.

21. **TECHNICAL DRAWING.** Two credit hours. (First term, third year, Tu. Th. 8-10. Course in Chemical Engineering.) Must be preceded by Course 3. Associate Professor French.

22. **TECHNICAL DRAWING.** Two credit hours. (Second term, third year, W. Th. 1-3. Course in Chemical Engineering.) Associate Professor French.

23. **TECHNICAL DRAWING.** Two credit hours. (Third term, third year, M. Tu. 1-3. Course in Chemical Engineering.) Associate Professor French.

DEPARTMENT OF ASTRONOMY

(The Emerson McMillin Observatory)

PROFESSOR H. C. LORD, MR. SKIMMING

MR. J. WARREN SMITH, SPECIAL LECTURER ON METEOROLOGY

The Emerson McMillen Observatory is the gift of Mr. Emerson McMillin, of New York, and was built and equipped in 1895. The equipment consist of a twelve-inch equatorial telescope, mounting by Messrs. Warner & Swasey, objective by Mr. Brashear, with a large and powerful spectroscope by Mr. Brashear. This instrument is adapted to use either one or two prisms or a grating and is provided with a double set of objectives one corrected for the visual and one for the photographic rays; a positive micrometer with a seven-inch circle by Messrs. Warner & Swasey; a combined zenith telescope and transit instrument of three inches clear aperture by Mr. G. N. Saegmueller; a sidereal clock by Clemens Riefler, of Munich; a comparator by Carl Ziliss; a four-inch portable equatorial by Alvan Clark; a chronograph by Warner & Swasey; sextants, chronometers, meteorological instruments, etc. In addition to the above, Mr. McMillin's gift provides for an excellent astronomical library.

1. **GENERAL ASTRONOMY.** Lectures and recitations on the general principles of Astronomy. Non-mathematical. Text-book, Young's General Astronomy. Twice a week, three terms. Tu., Th., at 1. Professor Lord.
2. **ASTRONOMY, GEODESY AND LEAST SQUARES.** Lectures on practical Astronomy, supplemented by practice with the instruments of the Emerson McMillin Observatory. Text-book, Doolittle. Three times a week, three terms. M., W., F., at 11. First and second terms, third year; Course in Civil Engineering. Third term, third year, M., Tu., W., F., at 11. Course in Civil Engineering. Professor Lord.
3. **METEOROLOGY.** Lectures on practical meteorology, supplemented by laboratory work in map and chart making and regular observations with the instruments in use by the Weather Bureau. Text-book, Waldo, with daily weather maps issued by the Bureau. Twice a week. Third term. Tu., Th., at 4. Mr. J. Warren Smith.
4. **ADVANCED ASTRONOMY.** Lectures, Reading and Laboratory work from 3 to 5 hours a week, three terms. Courses will be offered in Theoretical Astronomy or Astrophysics, as students may elect. Students must have had the calculus. Hours to be arranged. Professor Lord.

DEPARTMENT OF BOTANY

[Botanical Hall.]

PROFESSOR KELLERMAN, ASSOCIATE PROFESSOR SCHAFFNER, FLORIST JENNINGS, MR. TYLER, MR. BRIDWELL

The General Botanical Laboratory is on the second floor of Botanical Hall. It is equipped with compound microscopes of the Bausch and Lomb, the Leitz and other patterns; and accompanying each is a tray of tools and a case of reagents. There are more than fifty dissecting microscopes, also charts, and several minor pieces of apparatus for experiments in vegetable physiology. Three small rooms are also provided as laboratories for special work, as well as a dark room for photography. Other facilities for the illustration of the courses in botany, and for practical training in the same are: A general herbarium, including flowering plants, ferns, mosses, fungi and algae; a State herbarium, a collection of fruits and seeds, valuable timbers, woods, grasses and various economic products of the vegetable kingdom; ornamental grounds and woodland, planted with a large variety of evergreen and deciduous trees and shrubs; and a greenhouse and propagating house with a fair collection of native and exotic plants.

The Botanical Museum contains, besides the general University herbariums, and the State herbarium (over 30,000 mounted sheets), Professor Kellerman's private herbarium of over 20,000 specimens deposited for use in the Botanical department; a complete collection of the native woods of Ohio; a collection of the seeds and fruits of plants; a collection of native medicinal plants; a general collection of vegetable products, including seeds, textile fabrics, coloring substances, etc., illustrating economic or applied botany.

UNDERGRADUATE COURSES

1. **ELEMENTARY BOTANY.** Lectures and recitations. Credit five hours. Text-book, Kellerman's Elementary Botany and Spring Flora. This is a general course introductory to those to follow. It comprises mostly Organography and Vegetable Physiology and a study of the native flora, but some instruction is also given in Ecology and Classification. For the practical or laboratory work, Kellerman's Practical Exercises is used as a guide. The students are required to do some work in the field in both observation and collecting. Third term. M., T., Th., F., at 10. Professor Kellerman.

3. **SYSTEMATIC AND PHYSIOLOGICAL BOTANY.** Credit four hours. This course is planned for students preparing for a course in medicine; it deals somewhat fully with Ecology and Physiology, also Morphology and Classification. The students are required to add to their herbariums begun in the Spring term and thus obtain a full set of native medicinal plants. First term. M., Tu., F., at 10; Laboratory, Th., 1 to 3. Professor Kellerman and Associate Professor Schaffner.

4. **MEDICAL BOTANY.** Credit two hours. This course is devoted exclusively to laboratory study of the medicinal plants and vegetable products used in medicine. Maisch's Organic Materia Medica is mainly followed. Second term. Tu., Th., 2 to 4. Professor Kellerman and Associate Professor Schaffner.

6. **PHYSIOLOGICAL BOTANY.** Lectures and recitations three times a week and laboratory and field work. Text-book, Coulter's Plant Studies. First term. M., W., F., at 8. Laboratory, Sec. 1, Monday, 1 to 4. Sec. 2, Wed., 1 to 4. Professor Kellerman and Associate Professor Schaffner.

7. **ECONOMIC BOTANY.** Lectures, recitations and laboratory. Text-book, Coulter's Plant Studies. This course is, in part, a continuation of course 9, but the major portion of the term is devoted to a botanical study of economic plants and the vegetable products of commerce. Second term. M., W., F., at 8. Laboratory, Sec. 1, Monday, 1 to 4. Sec. 2, Wed., 1 to 4. Professor Kellerman and Associate Professor Schaffner.

8. **VEGETABLE PATHOLOGY.** Lectures, recitations. Laboratory and field work. Text-book, Massee's Plant Diseases. The diseases of plants due to inorganic causes are briefly studied, but the main part of the course is devoted to a study of the parasitic fungi most destructive to cultivated plants. The means of their prevention forms the last part of the course. The laboratory and field work deals mainly with the commonest and most injurious parasitic fungi. Each student takes up the latter part of the term some economic subject or group of parasites for special study. Third term. M., W., F., at 8. Laboratory, Sec. 1, Tuesday, 1 to 4. Sec. 2, Thursday, 1 to 4. Professor Kellerman and Associate Professor Schaffner.

9. **DENDROLOGY.** Lectures and field work. Credit two hours. Kellerman's Forest Trees of Ohio and various reference books are used. The native trees are studied and illustrative collections made. First term. Tu., Th., 10 to 12. Professor Kellerman.

10. **DENDROLOGY.** Laboratory work and special investigations on the structure and diseases of timber. Credit two hours. Second term. Laboratory open daily 8 to 12. Professor Kellerman.

11. **LABORATORY WORK.** Special investigation in Economic Botany and Vegetable Pathology. Credit two to five hours. First, second and third terms. Laboratory open daily 8 to 12. Professor Kellerman and Associate Professor Schaffner.

12. **PHYSIOLOGICAL AND HOUSEHOLD BOTANY.** Lectures, recitations and seminary work twice a week. Tuesday and Thursday, first hour; laboratory period once a week—1 to 4 p. m., Friday. Credit, 3½ hours. This course is planned exclusively for students in Domestic Science. Ecology, Physiology, Morphology and Classification are briefly reviewed, Barnes' Outline of Plant Life being used for the first part of the work. The main part of the course is devoted to economic botany, particularly to those phases which concern household work and home life. This includes a study of useful species, as culinary, medicinal, starch, oil and fibre producing plants. Special attention is given to yeast fermentations, enzymes, bacteria, anti-

septics, fungicides, food-destroying fungi, and mushrooms. Three terms. Tu., Th., at 8. Laboratory, Friday, 1 to 4. Professor Kellerman and Associate Professor Schaffner.

16. **LABORATORY WORK.** In this course the student undertakes special investigations on medicinal plants, poisonous plants, adulterations, etc. Credit two to five hours. Laboratory open daily 8 to 12. Professor Kellerman and Associate Professor Schaffner.

21. **ECOLOGY.** Lectures, recitations, laboratory. Coulter's Plant Relations is used the first term and his Plant Structures and Department reference book the remainder of the year. Besides the general work in laboratory, lecture room and field, each student is assigned a special subject in ecology; occasional reports on current botanical literature are also required. First term. Tu., Th., at 9. Laboratory Tu., 2 to 4. Professor Kellerman and Associate Professor Schaffner.

22. **MORPHOLOGY AND PHYSIOLOGY.** Continuation of course 21. Credit three hours. Second term.

23. **SYSTEMATIC BOTANY.** Continuation of course 22. Credit three hours. Third term.

24. **LABORATORY AND FIELD WORK.** Credit two or three hours. Three terms. Daily, 8 to 12. Professor Kellerman and Associate Professor Schaffner.

25. **LABORATORY WORK IN HISTOLOGY AND PHYSIOLOGY.** Credit three to five hours. Prerequisite, course 6, 7, 8 or 21, 22, 23. Three terms. Laboratory open daily. Associate Professor Schaffner.

26. **ADVANCED LABORATORY WORK IN HISTOLOGY AND MICROTECHNIQUE.** Credit five hours. Prerequisite, courses 6, 7, 8 or 21, 22, 33. Three terms. Laboratory open daily. Associate Professor Schaffner.

27. **LABORATORY AND FIELD WORK IN SYSTEMATIC BOTANY.** Credit three to five hours. Prerequisite, courses 6, 7, 8 or 21, 22, 23. Three terms. Laboratory open daily. Professor Kellerman.

GRADUATE COURSES

28. **RESEARCH WORK IN SYSTEMATIC BOTANY.** Credit 5 hours. Prerequisite, courses 6, 7, 8, or 21, 22, 23. Three terms. Laboratory open daily. Professor Kellerman.

29. **RESEARCH WORK IN MORPHOLOGY AND PHYSIOLOGY.** Credit five or ten hours. Prerequisite, course 26. Three terms. Laboratory open daily. Associate Professor Schaffner.

30. **MONOGRAPHIC WORK.** Credit five or ten hours. Prerequisite course 27. Three terms. Laboratory open daily. Professor Kellerman.

31. **RESEARCH WORK IN ECOLOGY.** Credit five or ten hours. Prerequisite courses 6, 7, 8, or 2, 22, 23. Three terms. Laboratory open daily. Associate Professor Schaffner.

32. **MINOR INVESTIGATIONS.** Field and laboratory work. Credit one to three hours. Prerequisite course 7. Three terms. Daily. Professor Kellerman and Associate Professor Schaffner.

33. **CURRENT LITERATURE.** Prescribed critical reading and indexing. Credit one to three hours. Prerequisite, course 7. Three terms. Daily. Professor Kellerman.

DEPARTMENT OF CHEMISTRY

[Chemical Hall, Rooms 7, 14, 18, 21, 22, 24, 25.]

PROFESSOR MCPHERSON, PROFESSOR NORTON, ASSOCIATE PROFESSORS HENDERSON AND FOULK, MR. LINVILLE, MR. DUBOIS, MR. HANCE

The Department of Chemistry occupies the larger portion of the Chemical Hall. The main lecture room is situated on the second floor and has a seating capacity of one hundred and seventy-five persons. There are four main laboratories; one for students in elementary chemistry and qualitative analysis, accommodating two hundred and fifty; one for quantitative analysis, one for quantitative analysis with desks for fifty; one for advanced qualitative and sanitary analysis, and one for organic chemistry, each with accommodation for twenty. In addition to these, there is an office, a balance room, three private laboratories and several smaller rooms used for combustion work, spectroscopic work and private investigations.

The laboratories are equipped with all the modern conveniences as water, gas, steam ovens, drying ovens, automatic air blasts, electric lights, etc. Distilled water is piped from the large still in the attic to each room.

Each student has his own desk with drawers and locker. All supplies are obtained from the chemical store room which is liberally provided with all the apparatus and material necessary for chemical investigations.

The department is also well equipped with all apparatus necessary for experimentally illustrating the class room work. The main lecture room is furnished with cases which contain a large collection of specimens for purposes of illustration.

1. **ELEMENTARY CHEMISTRY.** Arranged for students who have little or no knowledge of chemistry. Three sub-divisions; one lecture, one quiz, and three hours' laboratory practice weekly throughout the year. In the laboratory the student performs an extended series of experiments illustrating the principles of chemistry. Three hours credit. First, second and third terms. Lecture, Th., at 1. Quiz., Tu., at 1. Laboratory, Monday, 2 to 4, or Sat., 8 to 11. Professor McPherson, Associate Professor Henderson, Mr. Dubois.

2. **QUALITATIVE ANALYSIS.** Laboratory, lectures and quiz. Students familiarize themselves with the properties of the elements with a view to their detection, and then apply this knowledge to the analysis of unknown substances. This course must be preceded by course 1 and accompanied by course 21 unless special permission is obtained from the instructor in charge. Three to five hours credit. First and second terms. Students electing this course will take course 17 in the third term. Afternoons. Associate Professor Foulk.

3. **ELEMENTARY CHEMISTRY.** Recitations and Laboratory. Aranged for students in the Short Courses. First and second terms. Five hours credit each term. Lecture M., 8 to 9. Quiz., Th., 10 to 11. Laboratory, Tu. and W., 1 to 4. (First term, M., 8; Tu., W., 1 to 4; Th., 10. Second term, M., Fellows. (First term, M., 8; Tu., W., 1 to 4; Th., 10. Second term, M., 3; Tu., W., 1 to 4; Th., 10; first year, Course in Clayworking; second year, Short Course in Mining.) Chemical Hall. Associate Professor Henderson and Department Fellows.

7. **ELEMENTARY CHEMISTRY.** Inorganic. Lectures, laboratory and quiz. Laboratory work: First term experiments upon the non-metals. Second term, experiments upon the metals, leading to qualitative analysis. First and second terms. Five hours credit each term. Lecture M. 8 or 3. Quiz.,

F., 9, 10, 11, 3; Laboratory, M., Th., 9-12; Th., F., 9-12; Th., F., 1-4; or W., 8-10 Sat., 8-12. Chemical Hall. Professor McPherson, Associate Professor Henderson and Department Fellows.

8. **ORGANIC CHEMISTRY.** Laboratory, Lectures and Quiz. The laboratory work includes the preparation of typical organic compounds. The Course must be preceded by Courses 20 and 21 unless special permission is obtained from the instructor in charge. First term. Five hours credit. Lab., M., 1-5; Sat., 8-12. Lecture, time aranged with the instructor. (First term, third year, M., 1-5; S., 8-12, Course in Chemical Engineering.) Professor McPherson.

9. **ORGANIC CHEMISTRY.** Lectures and laboratory. Continuation of Course 8. Five credit hours. Second and third terms. Lab., F., 1-4; Sat., 8-12. Lecture, time to be arranged. (Second term, third year, F., 1-5; S., 8-12. Course in Chemical Engineering.) Professor McPherson.

11. **TOXICOLOGY.** Lectures and recitations. This course treats of poisons — their effects, antidote and detection. This course must be preceded by the equivalents of Course 1 and 2. Third term. Four hours credit. M., Tu., Th., F., 10-11. Professor Norton.

12. **QUALITATIVE ANALYSIS.** Recitation and Laboratory. Third term. Four hours credit. Recitation, Th., 10-11. Lab., Tu. and W., 1-4. Rooms 22 and 24 Chemical Hall. Five credit hours. (Third term, first year, W., 8-10; F., 1-4; S., 8-11; Th., 10. Course in Clayworking.) Professor McPherson, Associate Professor Henderson and Department Fellows.

15. **SANITARY CHEMISTRY.** Lectures and laboratory. A study of the most important chemical methods for the analysis of water and air. Four credit hours. (Third term, fourth year, Tu., Th., 10; F., 1-5. Course in Chemical Engineering.) Associate Professor Foulk.

17. **INORGANIC PREPARATIONS.** Laboratory and recitations. This course includes the preparation of chemically pure inorganic substances from the crude materials. Three to five hours credit. Third term. Afternoons. Associate Professor Henderson.

20. **QUANTITATIVE ANALYSIS.** Laboratory, lectures and recitations. This course is designed to give the student a knowledge of the first principles of gravimetric and volumetric analysis. It must be preceded by courses 1 and 2 and must be accompanied by courses 21 and 31. Three to five hours credit. First, second and third terms. Lecture, Mon., at 1; Lab., Tu., 1-4; F., 9-12. (First, second and third terms, second year, M., Tu., 1-4; W., 1-3. Course in Chemical Engineering. Option third year, Course in Manual Training.) Associate Professor Foulk.

21. **ADVANCED GENERAL CHEMISTRY.** Lectures and recitations. This course consists of a rapid review of the fundamental physical and chemical laws relating to chemistry, followed by a thorough study of the principles of general inorganic chemistry. It should accompany course 20. Two hours credit each term. First, second and third terms. Tu. and Th., 10-11. (First, second and third terms, second year, Tu., Th., 9. Course in Chemical Engineering. Option third year Course in Manual Training.) Associate Professor Henderson.

22. **ORGANIC CHEMISTRY.** Recitations and laboratory. This course includes the preparation of some of the important compounds used in medicine. Second term. Five hours credit. Lab., F., 1-4; Sat., 8-12; Recitation time arranged with instructor in charge. Professor McPherson.

25. **HISTORICAL CHEMISTRY.** Lectures and recitations. Three hours credit. Third term. This course must be proceded by course 21. Hours arranged with the instructor. Professor Norton.

26. **CHEMICAL SEMINARY.** Advanced students meet for the discussion of special topics and current literature. One hour credit. First, second and third terms. Monday evenings.

27. **ADVANCED CHEMISTRY.** Laboratory and reference work. Three to five hours credit. Hours arranged with the instructor.

(a) Organic. Arranged for students who have completed course 8 and 9. The work includes the further preparation of typical organic compounds, their purification and analysis. Professor McPherson.

(b) Inorganic. This course is especially designed for students who have completed course 17, and are desirous of studying the methods of preparation and the properties of a series of inorganic substances; or for those who have completed course 21 and desire to continue the study of certain chapters of inorganic chemistry. Associate Professor Henderson.

(c) Analytical. Special topics such as the critical study of methods, etc. Associate Professor Foulk.

28. **ORGANIC CHEMISTRY.** Lectures on special topics. This course must be preceded by courses 8 and 9 and preferably by course 27 (a). Two hours credit. Hours arranged with the instructor. Professor McPherson.

29. **RESEARCH WORK, LIBRARY AND LABORATORY WORK.** Five to ten hours credit. First, second and third terms. Hours to be arranged. Professor McPherson, Associate Professor Henderson, Associate Professor Foulk.

30. **PHYSICAL CHEMISTRY.** Lectures and recitations. A discussion of the subject as outlined in Walker's Chemistry. This course must be preceded by courses 20 and 21. Three hours credit. Second and third term. M., W., F., at 8. (Second and third terms, fourth year, M., W., F., 8. Course in Chemical Engineering.) Associate Professor Henderson.

31. **STOICHIOMETRY.** Recitations. Drill in solution of chemical problems. Two hours credit. First term. Tu. and Th. at 11. (First term, second year, Tu., Th., 11. Course in Chemical Engineering.) Assistant Professor Foulk.

32. **INDUSTRIAL CHEMISTRY.** Laboratory and lectures. This course must be preceded by at least the equivalent of course 20. Four hours credit. Tu., Th., at 10; W., F., 1 to 3. (First term, Tu., F., 10; F., 1-3. Second term, Tu., Th., 10; F., 1-3. Fourth year. Course in Chemical Engineering.) Professor Norton.

33. **ANALYTICAL CHEMISTRY.** Laboratory, lectures and recitations. The laboratory work is in the main a continuation of course 20, which must precede it. Some special qualitative analysis is also given. Lectures and recitations include: (a) a general review of qualitative and quantitative methods; and (b) the theory of analytical operations and reactions. Oswald's Scientific Foundations of Analytical Chemistry is used as a text book during part of the year. Four or five hours credit. First, second and third terms. Hours arranged with the instructor. Associate Professor Foulk.

DEPARTMENT OF CIVIL ENGINEERING

[Hayes Hall, Rooms 13, 14, 19.]

*Professor Brown, Professor Sherman, Professor Heller, Associate Professor Eno, Mr. Davies

The Department occupies the east and west wings of the second floor and two basement rooms in Hayes Hall. The large and well lighted room of the east wing, 38 x 47 feet, is equipped with 50 drawing tables and is used for the department drawing classes. A large case of drawers filled with shop drawings, working drawings and maps, gathered from practicing engineers, is open to students for study and consultation. A considerable outfit of office drawing instruments is provided for those students requiring them in special work. This includes long steel straight edges, large triangles, parallel rulers, protractors, section liners, planimeter, pantograph, etc.

In the west wing are the instrument and blue print rooms, and the recitation room, equipped with electric lantern. The instruments for instruction in surveying include one high grade transit, seven other transits fitted for various kinds of surveying, four leveling instruments, solar compass, solar attachments for two transits, two high grade aneroid barometers, rods, chains, tape lines, hand levels, two current meters for measuring flow of water in streams. There is also a complete camp outfit for the summer field work in surveying.

The blue print room has three large frames and abundant facilities for preparing paper and washing prints.

There is a collection of models for illustration of bridge and roof trusses and of problems in stereotomy. Numerous photographs of bridges and other engineering structures are included.

The basement rooms are equipped for cement testing with two testing machines, a Boehme hammer, briquette molds, sieves, hot test apparatus, etc.

The Department has, for rating current meters, an excellent course 175 feet long in one side of the reservoir belonging to the University Power Plant.

1. **LAND SURVEYING.** Recitations and field work. Johnson's Theory and Practice of Surveying. Six credit hours. (First term, second year, M., Tu., W., Th., F., 1, M., 2-4; or M., Tu., W., Th., F., 11, Tu., 2-4; or M., Tu., W., Th., F., 1, W., 2-4. Course in Civil Engineering.) Professors Sherman and Eno, Mr. ———, and Mr. Davies.

2. **RAILROAD SURVEYING.** Recitations and field work. Searle's Field Engineering and Crandall's Transition Curve. Six credit hours. (Third term, second year, M., Tu., W., Th., F., 1, M., 2-4; or M., Tu., W., Th., F., 11, Tu., 2-4; or M., Tu. W., Th., F., 1, W., 2-4. Course in Civil Engineering.) Profesors Sherman and Eno, Mr. ——— and Mr. Davies.

3. **TOPOGRAPHICAL SURVEYING.** Lectures, field work and drawing. Johnson's Surveying used for reference. Four times a week. (First term, third year, M., Th., 10, S., 8-12; or Tu., F., 10, S., 8-12. Course in Civil Engineering.) Professor Sherman.

4. **TOPOGRAPHIC DRAWING.** Platting, pen and tinted work. Reed's Topographical Drawing and Sketching. Four credit hours. (Second term, second year, M., Tu., 1-4, W., 1-3; or Th., F., 2-4, S., 8-12. Course in Civil Engineering.) Mr. ———.

*Died March 6, 1902.

6. **STEREOTOMY.** Recitations, drawing and model cutting. Warren's Stereotomy. Four credit hours. (Second term, third year, M., Th., 10, S., 8-12; or Tu., F., 10, S. 8-12. Courses in Architecture and Civil Engineering.) Professor Eno.

7. **BRIDGE STRESSES.** Recitations and lectures. Part I of Dubois's Stresses in Framed Structures. Five credit hours. (Third term, third year, M., Tu., W., Th., F., 8 or 9. Course in Civil Engineering.) Professer Heller.

8. **BRIDGE DESIGNING.** Lectures and drawings. Part II of Dubois's Stresses in Framed Structures and Johnson's Modern Framed Structures used for reference. Five credit hours. (First term, fourth year, M., Tu., W., Th., F., 2-4. Course in Civil Engineering.) Professor Heller.

10. **SANITARY ENGINEERING.** Recitations and lectures. Folwell's Sewerage. Five credit hours. (Third term, fourth year, M., Tu., W., Th., F., 11. Course in Civil Engineering.) Professor Eno.

14. **CIVIL ENGINEERING LABORATORY.** Cement testing. Two credit hours. (Second term, fourth year, M., 1-5; or Tu., 1-5. Course in Civil Engineering.) Professor Sherman or Professor Eno.

15. **MASONRY CONSTRUCTION.** Recitations and lectures. Baker's Masonry Construction. Five credit hours. (First term, fourth year, M., T., W., Th., F., 9. Courses in Architecture and Engineering.) Professor Sherman.

16. **HIGHWAYS.** Recitations and lectures. Byrne's Highway Construction. Five credit hours. (First term, third year, M., Tu., W., Th., F., 8 or 9. Course in Civil Engineering.) Professor Eno.

17. **RAILWAY LOCATION.** Recitations and lectures. Wellington's Economic Theory of Railway Location. Five credit hours. (Second term, fourth year, M., Tu., W., Th., F., 8. Course in Civil Engineering.) Professor Sherman.

18. **WATER SUPPLY.** Recitations and lectures. Folwell's Water-Supply Engineering. Five times a week. (Third term, fourth year, M., Tu., W., Th., F., 8. Course in Civil Engineering.) Professor Eno.

19. **TRUSSES.** Lectures and drawing. Five credit hours. (Third term, third year, M., Tu., Th., F., 10, W., 11, or M., T., W., Th., F., 11. Courses in Architecture, Mining and Mechanical Engineering.) Professor Heller.

21. **SURVEYING.** Recitations and field work. Bruce and Ketchum's Manual. Three credit hours. (Third term, fourth year, M., W., F., 9. Courses in Architecture and Industrial Arts.) Mr. ——— and Mr. Davies.

22. **SUMMER COURSE IN FIELD WORK.** The students are taken into camp in a rough, broken country and given a thorough drill in land and elementary railroad surveying. The course begins directly after Commencement Day, and continues four weeks of six days per week, ten hours per day. The work of the student and the discipline of the camp is in the hands of competent instructors. This course must be preceded by Courses 1, 2 and 4. Students conditioned on any of these courses may be admitted at discretion of instructor in charge. (At conclusion of second year of course.) Professors Sherman, Eno, Mr. ——— and Mr. Davies.

23. **SUMMER COURSE IN FIELD WORK.** Similar to Course 22. Students work on advanced railroad surveying and topographical surveying. This course must be preceded by Courses 3, 22 and 24. Students conditioned in any of these courses may be admitted at discretion of instructor. (At conclusion of third year of course.) Professors Sherman, Eno, Mr. ——— and Mr. Davies.

24. **DRAWING OF ENGINEERING STRUCTURES.** Five credit hours. (Second term, third year, M., Tu., 1-5. W., 1-3; or W., 3-5, Th., F., 1-5. Course in Civil Engineering.) Professor Sherman.

25. **ADVANCED BRIDGE WORK.** Draw-spans, continuous girders, steel arches, etc. Five credit hours. (Second term, fourth year, M., Tu., W., Th., F., 8. Option, Course in Civil Engineering.) Professor Heller.

DEPARTMENT OF CLAY WORKING AND CERAMICS

[Orton Hall, Rooms 4, 18, 25, 26, 27.]

PROFESSOR EDWARD ORTON, JR., MR. BLEININGER

The facilities of the Department for study in the field of clay working comprise: 1st. A convenient chemical laboratory, specially designed and equipped for the analysis and decomposition of silicates. 2. A complete mechanical outfit for the preparation of clays for pottery manufacture and the production of the ware itself, of any grade from earthen wares to porcelain. The machinery is of the latest type and comprises all important varieties in use for grinding, tempering, washing, filtering and molding. 3. A similar plant for the manufacture of brick, tiles, pipes, and hollow goods. The machinery here is of full size and samples up to a ton in weight can be received and transformed into the finished articles by any or all of the standard methods in commercial use. 4th. A kiln house, equipped with a kiln in which several hundred bricks, or an equivalent quantity of sewer pipe, stoneware, or pottery can be burnt. There is also provided a crucible melting furnace and a muffle furnace for testing glazes. A muffle kiln of larger size for burning pottery, glazed ware and decorated wares has recently been put into operation. 5th. A ceramic museum, containing a collection of American pottery and clay products of every class, is in process of installation. 6th. A library of the best literature on the subject, mainly German, but containing a few English and French works, and the trade periodicals.

The facilities of the Department for study in the field of cement and mortar materials comprise in addition to the foregoing plant, much of which is especially well suited to this purpose, the following special apparatus: 1st. An improved dry-ball-mill, of chilled iron for grinding the raw material together, and for grinding the cement clinker. 2d. A small cupola, fired with coke and using air blast, for the vitrification of the refractory silicates used. 3d. Access to the complete and well appointed cement-testing laboratory of the Department of Civil Engineering.

1. **CERAMIC CHEMISTRY.** This course is open only to those who have completed General Chemistry 12. The student begins the quantitative analysis of salts and chemicals, and later works on limestone and other easy minerals. Five credit hours. (First term, second year, M., T., W., 1-4. Course in Ceramics and Short Course in Clay-working.)
2. Continuation of Course 1. The student begins the quantitative analysis of clays and complex minerals, working first on samples of knwon composition, and later on unknown materials. Five credit hours. (Second term, second year, M., Tu., W., 1-4. Course in Ceramics and Short Course in Clay-working.)
3. Continuation of Course 2. The student completes the ultimate analysis of clays and begins the proximate or "Rational" analysis of clays and pottery bodies, following the methods of Seger. Five credit hours. (Third term, second year, M., Tu., W., 1-4. Course in Ceramics and Short Course in Clay-working.)

4. **LECTURES ON CLAY MANUFACTURE** (supplemented by frequent recitations). The origin, composition and properties of clays and other minerals employed in the clay, glass and cement industries. Five credit hours. M., T., W., T., F., 8. (First term, third year, Course in Ceramics; second year, Short Course in Clay-working.)

5. Continuation of Course 4. A series of lectures, with recitations, on the general principles of the manufacture of clay wares, including the selection and winning of the materials, their preparation and manufacture. Five credit hours. M., Tu., W., Th., F., 8. (Second term, third year, Course in Ceramics; second year, Short Course in Clay-working.)

6. Continuation of Course 5. A series of lectures, with recitations, on the drying, burning, and decoration of claywares, including the preparation of coloring materials, glazes, etc. Five credit hours. M., Tu., W., Th., F., 8. (Third term, third year, Course in Ceramics; second year, Short Course in Clay-working.)

7. **CERAMIC CHEMISTRY.** Continuation of Course 3. Open only to those who have completed that course. The analysis of glasses and glazes, devoting special attention to the use of hydrofluoric acid in silicate analysis, and to the determination of lead and boracic acid. Five credit hours. (Second term, third year, M., T., W., 1-4. Course in Ceramics.)

9. **LABORATORY WORK IN CERAMICS.** Open only to those who have completed Courses 3 and 6. The student will first practice the various methods of measurement of the physical properties of clays, and then will underake the production of such wares as are made from single clays; then wares made by blending two or more natural clays; and, then, such wares as are made from an artificial body. In each case the bodies will be burnt and tested. Five credit hours. (First term, fourth year, W., Th., F., 1-4. Course in Ceramics.)

10. Continuation of Course 9. The student will practice on the production of glasses and glazes, beginning with the natural "slip glazes" and taking successively the soft raw-lined glazes, the fritted lead-boracic-acid glazes, and the hard-fire leadless porcelain glazes. In each case the glazes will be made for use on some definite body, and will be made to "fit." Five hours credit. (Second term, fourth year, W., Th., F., 1-4. Course in Ceramics.)

11. Continuation of Course 10. The student will practice on the use of the coloring and opacifying oxides in glazes, and on the production of colors for the decoration of pottery, and of body-stains. Five credit hours. (Third term, fourth year, M., F., 8-12; F., 1-3. Course in Ceramics.)

12. **LECTURES ON CEMENT MANUFACTURE.** The theory of hydraulicity, the compounding, manufacture and testing of natural and Portland cements and hydraulic silicates. Open to students who have had courses 3 and 6. Facilities for laboratory work in making, burning and testing cements will be given. Five credit hours. (Second term, fourth year, M., Tu., W., Th., F., 11. Course in Ceramics.)

15. **THESIS.**

16. **GENERAL PRINCIPLES OF APPLIED CERAMICS.** A series of lectures on the chemical technology of the clay, glass and cement industries. Five credit hours. (Third term, fourth year, M., T., W., Th., F., 11. Course in Chemical Engineering.)

17. **PRACTICE** in making drawings and specifications for brick kilns, brick dryers, pottery kilns, gas producers, glass pot-furnaces, glass tanks, cement kilns and burning cylinders. Students will be allowed to specialize along the lines they intend to follow. Four credit hours. (Second term, fourth year, M., Tu., 1-5. Course in Ceramics.)

DEPARTMENT OF DOMESTIC ECONOMY

[Hayes Hall, Rooms 1, 3 and 10.]

PROFESSOR STONER, ASSOCIATE PROFESSOR SOUTHER

I. DOMESTIC SCIENCE

The course in Domestic Science aims to supplement the work of other departments and to apply it to practical home life. A woman should be conversant with the food principles, know where they are to be found, in how large proportions they should be supplied, how they are best prepared for consumption and the effect of each in the body. In a general way she should be able to analyze disease and be prepared to guard against it.

Industrial activities demand consideration. The consumptive side of economics is as important as the productive side and belongs to women. They should know absolute values, from every standpoint, and how to apply scientific knowledge in the affairs of every day life, and this knowledge does not come by studying text books, but by actually dealing with things. The home is founded on and protected by sanitary and hygienic laws and the mastery of them is quite within the province of every woman, when competent teachers are prepared to expound them. Their study is of no less interest than that of other sciences and every science and art is made more vital and more fascinating by a knowledge of some definite way in which it may be applied.

1. **FOOD ECONOMICS.** Lectures and recitations and laboratory. Lectures embracing a study of the evolution of society as affected by food conditions; second, a study of the food principles and their classification; third, the functions of the various foods; fourth, chemistry as applied in the study of the science of nutrition; fifth, the history and manufacture of food material, etc.; sixth, the care and use of ordinary utensils and furnishings. Three lectures and two laboratory periods are given in the Dairy Department under the direction of Professor Decker. Parallel readings are required. Laboratory work includes experimental work with foods and the preparation and serving of typical foods of certain classes. Credit five hours. First term. M., W., at 9. Laboratory, Tu. and W. afternoons.
2. **FOOD ECONOMICS.** Lectures and recitations and laboratory. This includes a continuation of the subject outlined in Course 1, and marketing, table setting and serving. By lecture and research work, the relative nutritive and money values of food are considered. Each student prepares a weekly dietary for the family. The amount expended is limited by the instructor. United States Agricultural Bulletin standards used. Parallel readings are required. Laboratory work is a continuation of Course 1. Credit five hours. Second term. M., W., at 9. Laboratory, Tu. and W. afternoons.
3. **THERAPEUTIC DIET AND EMERGENCY WORK.** Lectures and recitations and laboratory. The lectures, demonstrations and practical work are designed to set forth the principles of the dietetic treatment of various diseases and to consider such emergency cases as frequently require prompt treatment in the home, as well as the principles underlying good nursing. Food suitable for infants, invalids and convalescents is prepared in the laboratory. Parallel readings are required. Credit five hours. Third term. M., W., at 9. Laboratory, Tu. and W. afternoons.

4. (*a*) **PRESERVATION OF FOOD.** One half term.

(*b*) **HYGIENE OF CLOTHING.** One half term.

Lectures and recitations and laboratory.

(*a*) Includes a brief study of the causes of decomposition; a history of the methods employed in the preservation of foods; the economic value of canned foods and the principles involved in canning, preserving, etc.

(*b*) Includes a study of the structure of fibres and their proper treatment; the properties and cleansing effects of water and soap; the effect of blueing, etc. Experimental work with chemical reagents for the treatment of all kinds of stains, etc., and the use of disinfectants and their properties. Lectures on hygienic clothing and the proper care of all kinds of house linens, etc. Demonstration work in practical laundry methods. Credit five hours. First term. Tu., Th., at 11. Laboratory, Th. and F. afternoons.

10. **HOUSEHOLD SCIENCE AND SANITATION.** Lectures and recitations. A consideration of the best location for a house: its hygienic and sanitary construction and arrangement and approved methods of lighting, heating and ventilating. A consideration of water supplies and sanitary drainage. Furnishings of the house from the standpoint of utility, sanitation and economy. Parallel readings are required. Credit two and one-half hours. Third term. Tu., Th., at 9.

11. **ADVANCED FOOD ECONOMICS.** Lectures and recitations and laboratory. This subject includes advanced work in Food Economics and Dietaries. Parallel readings are required. Credit two and one-half hours. Second term. Tu., at 9. Laboratory, Th. afternoon.

12. **THEORY AND PRACTICE OF DOMESTIC SCIENCE.** Elective. Lectures and recitations, laboratory. This course is designed for young women who desire to take special professional training in Home Economics and who wish to study the educational, economic, scientific and practical principles involved in the application of those subjects in professional work. Parallel readings are required. Students electing this work must have completed courses 1, 2, 3, 4, 10, and 11. Credit five hours. Third term. M., F., at 10. Laboratory, Th. and F. afternoons.

II. DOMESTIC ART.

The object of this course is to give the student an insight into that cultural development of the race which has been gained through hand-work. The work is taken up along advanced educational lines; the value of manual training is emphasized and an effort is made continually to correlate the subjects taught in the Department of Domestic Art with other college work, such as History, Botany, Literature, Anthropology, Sociology, Economics, Drawing, etc. It is felt that too much stress cannot be laid upon the development of character as gained through manual training, and besides giving that deftness of hand which is a needed accomplishment with every woman.

Lectures and recitations and practice periods.

5. **LECTURES ON THE INDUSTRIAL AND ARTISTIC EVOLUTION OF SOCIETY.** History of the early races considered with special reference to the development in culture gained through hand-work. Practice work, preparation of a series of models comprising the different stitches used in plain hand sewing; darning, patching and ornamental stitches. Credit five hours. Second term. Tu., Th., at 11. Practice, Th. and F. afternoons.

6. **LECTURES ON TEXTILES.** Study of vegetable fibres; their growth and the process of their manufacture. Comparative economic value of fabrics. Practice work; machine and hand-work on underwear; drafting from simple measurements; use of patterns; making of simple straw hats and bows. Credit five hours. Third term. Tu., Th., at 11. Practice, Th. and F. afternoons.

7. **LECTURES ON TEXTILES.** Study of animal fibres; treatmnet of wool and silk fabrics; hygienic and artistic dress; consideration of line, form and color. Practice work: Costume designing in pencil and water color; drafting patterns by use of Tailoring System. Cutting and Fitting, Making of hat frames, covering and trimming the same. Credit four hours. First term. M., at 9. Practice, Tu. and W. afternoons.

8. **LECTURES ON HISTORY OF ART AND ARCHITECTURE AND HISTORIC COSTUMES.** Practice work: Making of a lined waist; cutting and fitting of dress skirts. Credit four hours. Second term. M., at 9. Practice, Tu. and W. afternoons.

9. **LECTURES ON HISTORIC ART AND ON THE DECORATION OF THE HOUSE.** Practice work: Making of a tailored skirt and jacket or of a party wrap or tea gown. Credit four hours. Third term. M., at 9. Practice, Tu. and W. afternoons.

NOTE.— Pupils are required to furnish all materials. Individual instruction is given throughout, the aim being to foster good taste and judgment in the use of expensive and inexpensive materials. Expressions of individuality are encouraged but held subservient to general artistic principles, to rules of hygiene and to prevailing modes. Pupils taking special or elective course and desiring to enter the class in dressmaking and designing, as given in the fall term, must have credits for such hand work as is done in Courses 5 and 6, and must take the lecture work of those courses, in the University. It is also essential to have had some practice in art work, both with pencil and water color.

DEPARTMENT OF ECONOMICS AND SOCIOLOGY

[University Hall, Rooms 17, 18.]

PROFESSOR CLARK, ASSISTANT PROFESSOR HAGERTY

The University, through the efforts and generosity of its friends, is possessed of a unique equipment for study purposes in these lines. This equipment comprises a large collection of railroad, municipal and school bonds; of stocks of all kinds; of letters of credit, drafts, foreign bills of exchange, bills of lading, checks, enclosures, statements, insurance policies, trust certificates, notes, mortgages and all the necessary forms of business papers; also collections of coins, illustrative of the various periods in our monetary history, foreign coins and scrip; also sets of maps and charts and a Kiepert-Commercial Globe 80 cent. in diameter. Ample facilities for statistical work are provided and a seminary room set apart for the use of laboratory material, documents, etc., is always open to advanced students. It is the policy of the department to make the statistical investigations and research work of advanced students contributory to the permanent equipment of the department, thus enriching the facilities from year to year with material of scientific and pedagogical value.

The University possesses a special library in economics consisting of several hundred volumes and pamphlets. Over thirty financial, commercial and trade journals are received and filed regularly.

UNDERGRADUATE COURSES

1. **ELEMENTS OF POLITICAL ECONOMY.** A careful study of the laws of production, exchange, distribution and consumption of wealth; combined with an analysis of the industrial actions of men as regards land, labor, capital, money, credit, rent, interest, wages, etc. Text-book, lectures and individual investigations. In the Economics-History group an option is given. It is desirable that students who do not come well prepared in history and with a fair amount of general knowledge of economic principles take courses 2, 3, 4, deferring course 1 to their second year. Law students will find this course well adapted to their work. Three hours through the year. Sec. 1, M., W., F., at 8; Sec. 2, M., W., F., at 9. Assistant Professor Hagerty. This course should precede all courses except 2, 3, 4.

2. **THE HISTORY OF INDUSTRIAL SOCIETY.** A general view of the evolution of industrial society; involving a study of the manorial and guild systems; of the rise of class interest; the formation of trading companies; landholding; labor laws; the development of capitalistic enterprise and the economic legislation, ideas and theories that grew out of these conditions; with special reference to England. Text-book, lectures and assigned readings. First term. Courses 2, 3, 4 are open to all students of the University without preliminary requirements. M., W., F., at 9. Professor Clark.

3. **INDUSTRIAL AND FINANCIAL HISTORY OF THE UNITED STATES.** A complete survey of American industries, financial resources and policies. The social aspects of the subject will be treated, in order to prepare the student for course 11 the following year. Lectures. Second term. M., W., F., at 9. Professor Clark.

4. **TRANSPORTATION.** A study of the development and present economic status of roads, canals and railroads in their relation to industry, society, and to the state. Third term. Lectures M., W., F., at 9. Professor Clark.

5. **PRACTICAL PROBLEMS: IMMIGRATION, MONEY, LAND.** First term. Tu., Th., at 9. Professor Clark.

6. **PRACTICAL PROBLEMS: RAILROADS, TARIFF, CRISES.** Second term. Tu., Th., at 9. Professor Clark.

7. **PRACTICAL PROBLEMS: OF LABOR AND CAPITAL.** Under the head of labor are discussed the problems of co-operation, profit sharing, strikes, eight-hour day, trade unions, etc. Under the head of capital are discussed the problems of municipal ownership of quasi-public utilities, trusts and capitalistic production. Third term. Tu., Th., at 9. Professor Clark.

8. **PUBLIC FINANCE AND TAXATION.** This course aims to make the student acquainted with the theory of public revenue and expenditure; and with the leading systems of financial administration throughout the world. Text-book and lectures. First and second terms. Tu. and Th., at 2. Assistant Professor Hagerty.

9. **MONEY, CREDIT AND BANKING.** This course involves the history and theory of the subject, a comparative study of monetary systems, currency, etc., together with the various methods of banking; national banks; clearing house system, etc.; with a critical analysis of proposals for reform. Lectures and collateral readings. Third term. Tu., Th., at 2. Assistant Professor Hagerty.

10. **COMMERCE.** The scope of this course is seen in the following arrangement of the work. First term: History and Geography of Commerce. Second term: Theory and Technique of Commerce. Third term: Art of Commerce. In this term's work a study will be made of various policies of extending foreign trade; the investment of capital and the establishment of industrial organizations. The course must be preceded by course 1, and either 2, 3 and 4; or 5, 6 and 7, and is to be elected in the third year. It should be followed in the fourth year by 18, 19 and 17*e*. Lectures, practical investigations and reports. Through the year. M., W., F., at 11. Professor Clark.

11. **SOCIOLOGY.** Text-books, lectures and original investigations. Through the kindness of the various officers of the Godman Guild-House opportunity will be provided students in this course of doing practical work at the guild. The course, as to time and subject matter, will be arranged to suit those in the city who may wish scientific training along the lines of charity and philanthropic work, and the State Board of Charities as well as the officers of the Associated Charities of the city are enlisted in the work of this course. First and second terms. M., W., F., at 1. . First term: Giddings' Elements of Sociology. Second term: Henderson's Dependents, Defectives and Delinquents. It must be preceded by 2, 3, 4. Assistant Professor Hagerty.

12. **THE HISTORY AND THEORY OF SOCIALISM.** A complete study of the subject in its historical, economic and critical espects. The socio-economic doctrines of the philosophers, the Utopias of Plato, More, Campanella, Cabet, etc., and the theses of the various German, French and English schools of socialists, will be treated. The origin of private property, the right to labor, rights of industrial classes and the fundamental principles of industrial society will be analyzed. Syllabus, lectures and collateral readings. Second and third terms. M., F., at 10. Professor Clark. Not offered in 1902-03.

13. **SOCIOLOGY AND STATISTICS.** Lectures and laboratory work. Text, Mayo Smith's Sociology and Statistics. This course may be taken separately or accompany course 11 or 21. Students making sociology a major should take this course in their third year. Through the year, F., at 10. Assistant Professor Hagerty.

14. **ECONOMIC LITERATURE AND LEGISLATION.** A round-table study of current industrial affairs; reviews of magazine articles, books, reports on bills, etc. Course 14 may be taken separately or accompany course 10, 18 or 20. Students making economics a major should take this course in their third year. Through the year, Th., at 8. Professor Clark.

15. **SEMINARY IN ECONOMICS.** Through the year, M., 2-4. All students who elect their major study in economics must take this course in their fourth year. Open, as elective, to other students, graduate and advanced undergraduate, on permission of the instructor. Should be preceded by courses 14 or 20, 12. The work for the ensuing year, 1902-1903, is outlined as follows: At each alternate meeting a practical problem will be presented and discussed. The other meetings will take up the study of Classical Economists: English, German and American. Those contemplating taking the course should arrange for this work in advance and receive their assignments. Professor Clark.

16. **THESIS WORK.** Twice a week, three terms. In this work, as far as possible, only original sources are used, and investigations made from real life. The aim is to set before each student the accomplishment of the task of extending in some degree, however slight, the boundaries of economic and sociological knowledge. Meetings are arranged with the instructor throughout the year. Professor Clark.

18. **BUSINESS LAW AND FORMS.** Text-book, lectures and laboratory work. May be taken in connection with course 10. First and second terms. Tu. and Th. at 11. Professor Clark.

19. **CORPORATION PROBLEMS.** This course aims at a complete analysis of the subject in both its theoretical and practical aspects. It follows course 18. Third term. Tu. and Th. at 11. Professor Clark.

20. **ECONOMIC THOUGHT AND INSTITUTIONS.** First term. M., F., at 10. Professor Clark. This course must be preceded by 1, and 2, 3, 4. Not offered in 1902-03.

21. **GROWTH AND DEVELOPMENT OF SOCIAL THOUGHT AND INSTITUTIONS.** This course should be preceded by courses 2, 3, 4 and 11, 22. Tu., Th., at 10. Through the year. Assistant Professor Hagerty. Not offered in 1902-03.

22. **PRIMITIVE SOCIETY.** This course must be preceded by course 11. Third term. M., W., F., 1. Assistant Professor Hagerty.

GRADUATE COURSES

17. **ADVANCED ECONOMICS.** From one to ten times a week, three terms. Hours arranged with students individually. Open to undergraduates only on permission of instructor. The aim of these courses is to offer the student an opportunity to specialize to any degree he may desire along the various lines within the field of the department. Elections will naturally fall under the following heads:

(a) Theoretical Problems. (b) Historical Problems. (c) Practical Problems. (d) Finance. (e) Commerce. (f) Sociology (Theoretical or Practical). (g) Statistics. (h) Teacher's Course and Training for Fellowship.

When several students elect the same line of work, they may constitute themselves a group and a seminary will be organized as a nucleus for such work. A *Seminary in Sociology* (17f) is announced for the year 1902-03. Students should give notice in advance if they desire to enter this course. Tu., 3-5. Professor Clark and Assistant Professor Hagerty.

DEPARTMENT OF EDUCATION

[University Hall, Rooms 51 and 54.]

ASSOCIATE PROFESSOR MAJOR, ASSISTANT PROFESSOR HAINES

The courses of this department are designed to meet the needs of three classes of students; first, those who, although not intending to engage in educational work, desire some acquaintance with the principles of education considered as a function of society; second, those who desire to make a professional study of education as a part of their preparation for positions as teachers, principals or superintendents; third, those preparing to teach education in normal schools or colleges.

The following courses offered by other departments of the University are especially valuable for professional students of education: Philosophy, 18, 19, 20, 21, 29, 42; Anatomy and Physiology, 1; Zoology, 21; Sociology, 11; European History, 1, 2, 3. Philosophy 18 and 19, or the equivalent required for admission to all courses except 1.

1. **EDUCATIONAL PSYCHOLOGY.** The aim of this course is to make a thorough study of laws and principles selected from standard psychological literature which seems to bear upon educational practice. Emphasis is laid upon the function of psychology in determining the selection and arrangement of school studies as well as upon its bearing on class-room procedure. The work of the first two terms will be based on James' Talks on Psychology and Adams' Herbartian Psychology supplemented by reference to standard psychological and educational literature. The course will include such topics as: The physical basis of mental life, native impulses and interests, habit, association of ideas, interest and attention, imitation and suggestion. The work of the third term will consist of a study of normal mental types, a description of the so-called stages of mental development, special topics in mental pathology. Open to second year students. Three terms. M., W., F., at 11. Associate Professor Major.

2. **INTRODUCTION TO EDUCATIONAL THEORY.** The chief purpose of this course is to enable the student to understand the nature of present day educational problems and to arouse interest in their critical study. An effort is made also to establish a body of educational principles derived from ethics, psychology, biology and sociology. The following topics will indicate the general nature of the course: Education as a science; the aim of education; educational values; the relation of psychology to education; the meaning and value of child-study; the learning process; stages of mental development; the selection and arrangement of school studies; prescribed and elective courses of study. Prerequisite: philosophy, 18 and 19, or their equivalent. Three terms. T., Th., at 2. Associate Professor Major.

3. **HISTORY OF EDUCATION.** This course gives an account of the most important educational movements and systems beginning with the oldest culture nations and concluding with a study of the present trend of education in this country and Europe. Constant reference is made to the influence of religious, political, and social ideals in controlling a people's educational aims and methods. Greek education; the rise of the universities; the Renaissance; the Reformation and education; the rise and development of humanism; the development of modern theories and systems of education. Prerequisite: philosophy 18, 19 or the equivalent. Should be preceded or accompanied by European History, 1, 2, 3. Three terms. M., W., F., at 2. Assistant Professor Haines.

4. **CHILD STUDY.** The first part of this course is designed to present the general facts and laws of physical growth and development with special reference to school hygiene. The following topics indicate the nature of this part of the course: Laws of bodily development, development of the nervous system, defects of sight and hearing, the fatigue problem. Principal references: Donaldson's Growth of the Brain, Warner's Study of Children, Rowe's Physical Nature of the Child. The second part of the course aims to describe the characteristic features of child mind, to study the principles and empirical data of mental development with special reference to educational theory and practice. The course includes a study of typical definitions of mental development, the theory of nascent periods, childrens' imagery, types of children, mental defects and abnormalities, the value of laboratory tests of mental ability. Principal references: Pedagogical Seminary; Trans. Ill. Soc. for Child Study; Educational Review; Sully's Studies of Childhood; Barnes' Studies; Baldwin's Mental Development. Prerequisite: philosophy 18, 19, or the equivalent. Three terms. T. and Th., at 3. Associate Professor Major.

5. **SCIENCE OF EDUCATION.** This course aims to afford a wide view of the science of education, endeavoring to develop a consistent theory of education. It is especially intended for students who expect to deal with the larger problems of education which confront the superintendent or principal. It means to widen the horizon and at the same time orient the student in this larger world. But all teachers should have this enlarged view and intelligent grasp of the fundamental problems of education, to make them masters of their craft. It should help all specialists to see the place of their particular grade or subject in the developmental process of the individual pupil. It is an essential part of the professional training of the teacher. Philosophy 18, 19 and education 1, 2 or 3 must precede this course. Lectures, reading and reports. Three terms. M., W. and F., at 11. Assistant Professor Haines.

6. **MODERN EDUCATIONAL SYSTEMS.** A comparative study of education in Germany, England and France, with a view to seeing wherein we can better our own educational organization. The course will deal briefly with the history of these systems, but chiefly with their present organization. The interest centers in the secondary education of those countries, and so the course will appeal chiefly to prospective high school teachers, or those who will be called upon to organize and develop high schools. Russell's German Higher Schools, Balfour's Educational Systems of Great Britain and Ireland, and the Reports of the U. S. Commissioner of Education constitute the essential literature for the course. Lectures, reading and reports. Not offered in 1902-1903.

7. **SECONDARY EDUCATION.** The history, curriculum, organization and administration of secondary education in the United States. After making a short study of the historical development of secondary education in the United States, the course will be concerned mainly with the problems of the public high school and will include a consideration of the various functions of the high school; the educational value and arrangement of the high school studies now generally accepted; the demand for changes in the contents and organization of the high school curriculum; a study of the Reports of the Committee of Ten and of the Committee on College Entrance Requirements will form an important feature of the course. The course is intended primarily for those who are preparing to become high school teachers or principals. Open to third and fourth year students, and graduates. Three terms. M., W., at 3. Associate Professor Major.

8. **EDUCATIONAL CLASSICS.** The aim of this course will be to make a critical and comparative study of such classes as Plato's Republic, Rousseau's Emile, Pestalozzi's Leonard and Gertrude, Froebel's Education of Man, Herbart's Science of Education, Spencer's Education. Prerequisite: Education 3 and philosophy 18, 19, or equivalent. Lectures, reading and reports. Three terms. T., Th., at 11. Associate Professor Major.

9. **SEMINAR.** Designed for students who wish to investigate special problems in education. Members of the course will work independently, but will meet once a week for general discussion of some subject under investigation. Open only to fourth year students and graduates who have worked extensively either in philosophy or education. Three terms. F., 4-6. Associate Professor Major.

DEPARTMENT OF ELECTRICAL ENGINEERING

[Office, Electrical Building, Room 8.]

PROFESSOR CALDWELL, ASSISTANT PROFESSOR FISH, MR. BROOKS

This Department has excellent facilities for practical experimental work with dynamo machinery and other electrical apparatus. The elementary electrical testing is provided for in the Physical Department, which permits this Department to devote its time to engineering apparatus proper. The dynamo equipment consists of twenty machines of various power. There are also a number of transformers of different makes, arc lamps of different styles, a 10 kilowatt-hour storage battery, condensers, resistances circuit breakers, magnetic testing apparatus, a telephone laboratory with apparatus for comparative tests, a variety of transmitters and receivers, lines running to another building, and material illustrative of switch-board practice. Photometry is given at present in the Physical Laboratory, where the equipment in this line is excellent.

Power for running the dynamo laboratory is supplied by three induction motors from the University Power Plant, which is itself illustrative of a model installation. There is also a well selected and growing collection of photographs, blue-prints, and material illustrative of electrical manufacture. The library of the Department is on the second floor and is especially valuable on account of the completeness of its sets of periodicals and transactions.

There is a machine shop and a machinist who gives half his time to construction and repair work.

Columbus and neighboring towns have many electric plants of different systems which welcome visiting students. It is also usual to make an inspection trip to one or more of the cities of the State to visit manufacturing establishments and other points of electrical interest.

The Electrical Hall was built in 1889, and is occupied entirely by the Department of Electrical Engineering. It is a two-story brick building about seventy-five by forty-five feet. On the first floor are the dynamo room, an office and apparatus room, a shop, a dark room for photography and a calibrating room. On the second floor are a lecture and draughting room 45 by 30 feet, a reading room and library, office, photometric, magnetic and telephone laboratories, locker room and janitor's room. The building and its equipments are valued at about nineteen thousand dollars.

6. **ELECTRICAL ENGINEERING.** Lectures on direct and alternating circuits, dynamo machinery, transformers, accumulators and their applications. Two credit hours. (First and second terms, third year, Course in Architecture; fourth year, Courses in Civil, Mechanical and Mining Engineering, Industrial Arts and Manual Training. First term, fourth year. Course in Chemical Engineering.) M., Th., at 10.

7. **ELECTRICAL ENGINEERING.** Laboratory work on the subjects treated in Course 6, which it accompanies. Two credit hours, fourth year.

First Term — Th., 1-5. Course in Chemical Engineering.
W., 1-5. Course in Industrial Arts.
W., 1-5. Course in Manual Training.
Tu. or W., 1-5. Course in Mechanical Engineering.
M., 1-5. Course in Mining Engineering.

Second Term — W., 1-5. Course in Architecture.
M. or T., 1-5. Course in Civil Engineering.
Th., 1-5. Course in Industrial Arts.
Th., 1-5. Course in Manual Training.
Th., 1-5, or
S., 8-12. Course in Mechanical Engineering.
W., 1-5. Course in Mining Engineering.

8. **DIRECT CURRENT DYNAMO MACHINERY.** Generators and motors, their theory, construction and operation. Lectures, recitations and problems. Four credit hours. (Second term, third year, M., Tu., Th., F. 9. Course in Electrical Engineering.)

9. **ELEMENTARY DYNAMO LABORATORY.** Handling and testing of circuits, generators, motors, etc. Four credit hours. (Third term, third year, W., Th., 1-5; or F., 1-5, S., 8-12. Course in Electrical Engineering.)

10. **ALTERNATING CURRENT CIRCUITS AND MACHINERY.** Generators, transformers, single and polyphase motors, apparatus and systems. Lectures, recitations and problems. Three credit hours. (First term, M., W., F., 11. second term, M., W., F., 8, fourth year. Course in Electrical Engineering.)

11. **ADVANCED DYNAMO LABORATORY.** Continuation of the work begun in Course 9, together with alternate current apparatus, telephone apparatus, accumulators, lamps, etc. Three credit hours. (First term, F., 1-5, S., 8-11; second term, F., 9-12, 1-4; third term, M., T., 1-4; fourth year. Course in Electrical Engineering.)

12. **ELECTRICAL TRANSMISSION AND DISTRIBUTION.** Systems, operation and apparatus. Two credit hours. (Second term, fourth year, Tu., Th., 8. Course in Electrical Engineering.)

13. **APPLICATION OF ELECTRICITY.** Brief treatment of the elements of lumination, street railway work, telephone, telegraph, electro-metallurgy, mining, etc. The seminary method is used in this course to the extent of each student writing one paper on some assigned subject, and reading the same before the class. Five credit hours. (Third term, fourth year, M., Tu., W., Th., F., 8. Course in Electrical Engineering.)

14. **ELECTRICAL DESIGN.** Includes wiring of buildings, direct and alternate current generators, transformers, distribution, etc. Four credit hours. (Second term, M., T., 1–4; W., 1–3; third term, Th., F., 1–4; fourth year. Course in Electrical Engineering.)

DEPARTMENT OF ENGLISH LITERATURE

[University Hall, Room 31.]

PROFESSOR BARROWS, ASSOCIATE PROFESSOR TAYLOR

Course 1 is prerequisite to all other courses, except those in the Bible. Most of the required texts of the poets and prose writers included in these courses, except Shakespeare, the Bible and novels, can be obtained of the department at a very moderate charge.

UNDERGRADUATE COURSES

1. **AN INTRODUCTION TO ENGLISH LITERATURE.** Three times a week through the year. Includes: (1) A review of the development of English literature; for this part of the work, Scudder's Introduction to English Literature is covered in three examinations. (2) Lectures on the elements of literary analysis and interpretation. (3) Critical study of selections characteristic of different authors and of various periods, to secure acquaintance with literary problems, to cultivate perception of literary qualities, and to verify the assertions of the lectures. The book first required for this part of the work in Palgrave's Golden Treasury. Two sections: Sec. 1, M., W., F., at 8. Sec. 2, M., W., F., at 9. Prof. Barrows.

2. **FROM SPENSER TO MILTON, EXCLUSIVE OF THE DRAMA.** Twice a week, first term. Tu., Th., at 1. Associate Professor Taylor.

3. **FROM DRYDEN TO POPE, EXCLUSIVE OF THE DRAMA.** Twice a week, second term. Tu., Th., at 1. Associate Professor Taylor.

4. **THE AGE OF JOHNSON, EXCLUSIVE OF THE DRAMA.** Twice a week, third term. Tu., Th., at 1. Associate Professor Taylor.

In courses 2, 3 and 4 is offered a connected view of both prose and poetry from Spenser to Burns. Each may be taken independently.

5. **PROSE FROM BURKE TO THE VICTORIAN AGE.** Three times a week, first term. M., W., F., at 1. Associate Professor Taylor.

6. **POETRY FROM BURNS TO THE VICTORIAN AGE.** Three times a week, second and third terms. M., W., F., at 1. Associate Professor Taylor.

These courses offer a survey of the literature of the early nineteenth century. Lectures on the rise of the romantic spirit; on the development of thought in this period; on the relations of authors to each other and to the times; and on the significance of their writings. Critical study of selections.

7. **THE ENGLISH BIBLE: THE PENTATEUCH AND EARLIER HISTORIES.** Once a week, through the year. Given in 1904–5.

8. **THE ENGLISH BIBLE: LATER HISTORIES, POETRY AND PROPHECIES.** Once a week, through the year. Given in 1902–3. Th., at 8. Professor Barrows.

9. **THE ENGLISH BIBLE: THE NEW TESTAMENT.** Once a week, through the year. Offered in 1903–4.

No other study in this department is prerequisite to these courses in the Bible: they are open to all students in the University, subject to the approval of the appropriate Executive Committee. Required Text: The Revised Bible.

10. **THE DRAMA FROM THE BEGINNING TO THE CLOSING OF THE THEATRES.** Three times a week, through the year. In the first term Shakespeare's plays are read, with no more reference to philology and history than is necessary to an understanding of the text, and various problems of dramatic art are discussed in connection with the plays that best illustrate them. In the second term the best Elizabethan plays are studied in the same way, and there is a course of lectures on the development of the drama. The study of plays, including at least three by Shakespeare, is continued in the third term. M., W., F., at 3. Professor Barrows.

11. **THE MODERN NOVEL.** Three times a week, first and second terms. Lectures, readings and written reports. M., W., F., at 2. Associate Professor Taylor.

12. **AMERICAN AUTHORS.** Three times a week, third term. Lectures, readings and written reports. M., W., F., at 2. Associate Professor Taylor.

13. **CHAUCER.** Three times a week, first term. M., Th., F., at 10. Professor Barrows.

14. **MILTON.** Three times a week, second term. M., Th., F., at 10. Professor Barrows.

15. **MODERN PLAYS.** Three times a week, third term. M., Th., F., at 10. Professor Barrows.

16. **LITERARY PROBLEMS.** Twice a week, through the year. A series of topical studies. Lectures followed by illustrative readings selected from the entire range of our literature: written reports and discussions. Tu., Th., at 3. Professor Barrows.

17. **MASTERPIECES: A STUDY OF LITERARY TYPES.** Three times a week through the year. Open to undergraduates who have taken not less than twelve term-hours of elective work in this department, and to graduates who have done an equivalent amount of work in literature. The study is of the origin and development of literary types, the best examples in English being chosen for basis. The types will include the drama, the epic, the idyll, the lyric, and in prose the novel, the short story and the essay. M., W., F., at 9. Associate Professor Taylor.

18. **VICTORIAN LITERATURE.** Twice a week, through the year. The study of the literary output of the Victorian age will be so arranged that the student can take the work of each term separately. Tu., Th., at 2. Associate Professor Taylor.

19. **CURRENT LITERATURE.** Twice a week, through the year. Open only to graduates and to undergraduates in the fourth year who have taken two elective courses in this department. M., F., at 10. Associate Professor Taylor.

23. **THESIS COURSE.** Two hours a week through the year. This course is designed for those who wish to make an extended investigation of a literary topic. The work will be either (a) a continuation of course 16 open to those who have taken that course; or (b) an enlargement of course 17 open to those who are enrolled in course 17. (a) F., 1; Professor Barrows. (b) F., 4. Associate Professor Taylor. Open also to graduates.

GRADUATE COURSES

The hours assigned to these graduate courses may be changed, if necessary.

20. **TRANSLATIONS.** Credit two hours, three terms. A study of the indebtedness of English to other literatures, and of various problems of general literature. Tu., at 2. Professor Barrows.

21. **MASTERPIECES: A COURSE FOR TEACHERS.** Credit five hours, three terms. Lectures in outline, to be developed by the student, on the literary aspects of each period; biographical studies of the authors of the masterpieces studied; extended criticism of masterpieces selected in consideration of their importance in the development of literature, and taken up in chronological order. An advanced review of the subject, designed for those who intend to become teachers. Th., at 2. Professor Barrows.

22. **THE DEVELOPMENT OF LITERARY TYPES.** Credit three hours, three terms. A course in comparative criticism, the types in English literature being referred to their models in classic or romance literature. It calls for a reading knowledge of French or German, and some acquaintance with Greek and Roman literature. M., at 4. Associate Professor Taylor.

DEPARTMENT OF EUROPEAN HISTORY

[University Hall, Rooms 7, 17, 36.]

PROFESSOR SIEBERT, MR. MCNEAL

The courses of instruction in this department are divided into two groups: (1) the general courses in Ancient, Continental and English history (courses 1, 2 and 3; 14; 5 and 6); and (2) the advanced courses, dealing in a fuller way with special periods and phases of the subject (courses 4, and 7 to 13 inclusive).

The general courses are intended to meet the needs of four classes of students: (a) those desiring only a general knowledge of European history; (b) those looking forward to advanced work in the department; (c) those studying Greek and Latin (see courses 5 and 6); and (d) those expecting to specialize in the line of American history, or to enter upon a legal or business career. For the fourth class courses 4 and 14 are especially recommended.

The advanced courses are intended to acquaint those qualified to enter them with an intimate knowledge of the special period or subject concerned, to give the student a comprehensive acquaintance with the best authorities, and practice in the written and oral exposition of assigned topics. Courses 1, 2 and 3 must precede these advanced courses, except that course 4 should be preceded by course 14.

1. **EARLY MIDDLE AGES.** The history of Europe to 1300, including the establishment of the mediæval empire, the formation of the separate states, the rise of the Christian church, the crusades, and the conflict of the empire and papacy. Lectures, recitations and assigned readings. Emerton's Mediæval Europe. Three times a week, first term. Two sections. Sec. 1: M., W., F., at 9, Professor Siebert. Sec. 2: M., W., F., at 1, Mr. McNeal.

2. **RENAISSANCE.** The history of Europe from 1300 to 1500, giving an account among other things of the revival of learning, the revival of commerce and industry, and the voyages of discovery. Lectures, recitations and assigned readings. Lodge's European History, 1272 to 1494. Three times a week, second term. Two sections. Sec. 1: M., W., F., at 9, Professor Siebert. Sec. 2: M., W., F., at 1, Mr. McNeal.

3. **MODERN EUROPE.** A general survey of European history from 1500 to the present time, including the Reformation, the rise of Russia and Prussia, the English and French revolutions, and the unification of Italy and Germany. Lectures, recitations and collateral readings. Schwill's Modern Europe. Three times a week, third term. Two sections. Sec. 1: M., W., F., at 9, Professor Siebert. Sec. 2: M., W., F., at 1, Mr. McNeal.

4. **POLITICAL AND CONSTITUTIONAL HISTORY OF ENGLAND.** This course is designed for students who expect to study law, or teach English history in the schools, and those who wish to know something of the origin of American institutions. Gardiner's Student's History of England. Three times a week, three terms. M., W., F., at 8. Professor Siebert.

5. **POLITICAL AND SOCIAL HISTORY OF GREECE TO THE ROMAN CONQUEST.** A short course introduced by a few lectures on ancient oriental history. Lectures, text-book and assigned readings. Botsford's History of Greece. Twice a week, first term. Tu., Th., at 9. Mr. McNeal.

6. **ROMAN HISTORY AND INSTITUTIONS TO THE END OF THE REPUBLIC.** This course, together with Course 5, is intended especially to meet the needs of students taking Latin and Greek, and those preparing to teach ancient history in the schools. Lectures, recitations and special reports. Tu., Th., at 9. Mr. McNeal.

7. **PERIOD OF THE PROTESTANT REFORMATION.** Open to those who have had courses 1, 2 and 3. This is an advanced course, and deals with reformational movements from the time of the death of Dante (1321), to the Council of Trent (1562). Lectures, collateral reading and investigations. Three times a week, first term. M., W., F., at 3. Professor Siebert.

8. **THE FRENCH REVOLUTIONARY AND NAPOLEONIC PERIODS, 1789-1815.** Open to students who have had courses 1, 2 and 3. An intensive study of the causes and effects of the French Revolution, and of Napoleon's struggle with Europe. Lectures, collateral reading and special reports. Three times a week, second term. M., W., F., at 3. Professor Siebert.

9. **HISTORY OF EUROPE IN THE NINETEENTH CENTURY.** Open to students who have had courses 1, 2 and 3. Lectures, assigned readings and topical reports. Three times a week, third term. M., W., F., at 3. Professor Siebert.

10. **HISTORY OF EUROPEAN COLLEGES.** Open to Students who have had courses 1, 2 and 3. A study of the colonial enterprises of Portugal, Spain, England, the Netherlands, France and Germany. This course begins with the age of geographical discoveries and traces the evolution of colonies to the present time. Lectures, assigned readings and investigations. Three times a week, first and second terms. Professor Siebert. (*Omitted in* 1902–1903).

11. **THE EASTERN QUESTION.** An advanced course treating of the relations of European powers with Turkey and Russia by means of lectures, topical reports and required readings. Open to students who have had courses 1, 2 and 3. Course 9 gives a special preparation for this course. Three times a week, third term. Professor Siebert. (*Omitted in* 1902–1903).

12. **THE HISTORY OF FRANCE.** From the ninth to the middle of the eighteenth century. Special attention will be given to French institutions. Open to students who have had courses 1, 2 and 3. Lectures, required readings and topical reports. Twice a week, first term. Tu., and Th., at 8. Professor Siebert.

13. **DOCUMENTARY AND BIBLIOGRAPHICAL STUDIES IN EUROPEAN HISTORY.** Practical exercises in bibliographical work and the use of original documents. Required of those intending to do thesis work in the department of European history. Lectures and special reports. Second and third terms. Two hours a week in one session. Th., 3 to 5. Professor Siebert.

14. **NARRATIVE HISTORY OF ENGLAND.** General course in the History of England intended especially for those wishing to take up course 4 in this department, and for those intending to work in American history or English literature. Lectures, text-book and reports. Three times a week, three terms. M., W., F., at 8. Mr. McNeal.

DEPARTMENT OF GEOLOGY

[Orton Hall, Rooms 1, 3, 8, 10 and 13.]

PROFESSOR PROSSER, PROFESSOR BOWNOCKER

The University is able to present unusual advantages for the study of Geology. Orton Hall, completed at a cost of more than $100,000, is designed for the permanent accommodation of the large geological collections of the University and for work and instruction in the Department of Geology. Nearly all of the finer varieties of Ohio building stone are represented in the columns, walls and ceiling panels of the vestibule. The central and rear portion of Orton Hall is occupied by the geological and paleontological museums. The petrographical laboratory is located on the second floor. In the basement a room is used for work in geographical modeling, the finished models being afterward placed in the collection of such models in a room set apart for the purpose on the second floor. The basement accommodates also the museum of economic geology. A paleontological laboratory or working room is also provided on the second floor.

By an act of the Legislature it has been put in possession of all the collections made by the late Geological Survey, and these collections have been supplemented by valuable additions of fossils and minerals from various sources. The State collection embraces a very complete representation of every geological formation shown in Ohio. In its new and ample quarters the department offers exceptionally good opportunities for work in the lithological, petrographical and modeling laboratories.

The catalogue of the museum contains more than 10,000 entries; but as only one number is as a rule given to a fossil or a mineral species, the individual specimens make an aggregate list of many thousands in addition to the catalogue list, and probably double this list.

1. **PHYSIOGRAPHY.** The topographic features of the earth's surface and the agencies producing these. The atmosphere, climate, etc. Oceans, rivers and lakes. Recitations, lectures and map work. Credit five hours. Third term. M., Tu., W., Th., F., at 11. Professor Bownocker

2. **GENERAL GEOLOGY.** Structural, Historical and Dynamical Geology. Lectures, Laboratory and Field Work. In the laboratory the Ohio Geological Reports and characteristic fossils will be studied. In the field, sections will be measured, formations identified, specimens collected and the student given an idea of the method of work pursued by a field geologist. First term. Five hours credit. Lectures, M., Tu., W., 11–12. Lab., Th., F., 10–12. Room 3, Orton Hall. Professor Prosser.

4. **ELEMENTARY GEOLOGY.** Recitations, lectures, laboratory work. Lithological, dynamical, structural and historical geology. Five times a week. Second term.

5. **ECONOMIC GEOLOGY.** The common minerals and rocks composing the earth's crust, their disintegration and decomposition. Soils, their origin and classification; the soils of the United States and especially those of Ohio. Fuels, coal, oil, and gas. Building stones, limes and cements. Iron and the most useful metals. Credit three and one-half hours. Second term. Lecture, M., T., W., at 8. Laboratory, Th., at 8. Professor Bownocker.

6. **ECONOMIC GEOLOGY.** Lectures and assigned reading. The nature of ores, their classification and origin. The metals of the United States, their distribution, abundance, modes of occurrence and origin. The non-metals, coal, oil, gas, clay, lime, cement, building stone, etc. In the discussion of the non-metals emphasis will be laid on the products of Ohio. Prerequisites, courses 11 and 12. M., W., F., at 9. Professor Bownocker.

7. **PETROGRAPHY.** Lectures and laboratory work. The igneous, sedimentary, and metamorphic rocks — their origin and classification. The volcanic rocks of the western United States — their composition, structure and alteration products. The object of this course is to give the student a practical acquaintance with rocks. Twice a week, second term. Professor Bownocker.

11. **INORGANIC GEOLOGY.** Including lithological, dynamical, and structural geology. Lectures, recitations, laboratory work, and field exercises. Three times a week, first term. M., W., F., at 9. Open to all. Professor Bownocker.

12. **HISTORICAL GEOLOGY.** A general course in paleontological and stratigraphical geology, with laboratory study of Dana's Manual of Geology, the Ohio Geological Reports and identification of characteristic fossils. The development of organisms and the classification and distribution of the geological formations are considered. Lectures, recitations and laboratory work. Three times a week, second term. Prerequisite, course 11. M., W., F., at 9. Last half of term, laboratory, F., 8-10. Professor Prosser.

13. **FIELD GEOLOGY.** Field and laboratory study of the geological formations readily accessible from Columbus. This course is intended to acquaint the student with the ordinary methods of field investigation, and involves the collection and identification of speciments, the measurement of geological sections and the preparation of a report describing the region studied. Three hours credit, third term. Prerequisite courses 11 and 12. Field trips Saturdays. Laboratory open M., F., 1 to 4. Professor Prosser.

14. **PALEONTOLOGY.** Careful training in systematic classification which may be used in the philosophical study of the development of plant and animal life, or as a means of becoming acquainted with the fauna and flora that characterize the various geological formations. At first the student devotes some time to conchology, studying recent shells in which the characters used in classification are well preserved, and after this preliminary work, fossils are studied. Fossils afford the most reliable data for identifying and correlating geological formations, and the critical study of fauna is a field especially adapted to independent research. Laboratory, museum and field work. Two to five hours credit. Three terms. This course may be undertaken at the beginning of the second or the third term. Prerequisite or accompanying courses, 11 and 12. Laboratory open M., F., 1-4. Professor Prosser.

15. **AREAL GEOLOGY.** Instruction in the methods of preparing geological maps and reports. The student compiles from a geological report a map with sections showing geological structure, and later traces the outcrops and prepare a geological map of some region. Two to five hours credit. First and third terms. Prerequisite courses 11, 12, 13 and 14. Field work Saturdays. Laboratory open M., F., 1-4. Professor Prosser.

16. **ADVANCED HISTORICAL GEOLOGY.** Work in paleontology and stratigraphical Geology for students who have had courses 11, 12, 13 and 14. Three to five hours credit. Three terms. Field work to be arranged with individual students, laboratory open M., F., 1-4. Professor Prosser.

17. **PHYSIOGRAPHY.** Introductory course. Study of the physiographic features of the earth's surface with special reference to North America; the agencies which produced these, and changes now in progress. The ocean and the atmosphere. Three terms. M., W., F., at 1. Professor Bownocker.

18. **GEOGRAPHIC GEOLOGY.** The origin, development and destruction of topographic forms. Rivers, lakes, oceans, ice, and winds as agents modifying the surface of the earth. Lectures, map work, field excursions. Three times a week, third term. Prerequisite, course 11 or 17. Tu., Th., 9-10. Professor Bownocker.

19. **PETROGRAPHY.** Laboratory and lectures. Optical crystallography, with practical determination of rock-forming minerals, macroscopically and microscopically. Study of the igneous rocks in the hnd specimen and thin section. Twice a week, three terms. The Sturtz rock collection and Voight Hockgesang thin sections of typical minerals and rocks will be studied. Books of reference: Mitchell Levy, Les Minneaux des Roches; Rosenbusch, Mikroscopische Physiographie der Petrographisch Wichtigen Mineralien, 3d ed.; Mikrosconische Physiographie der Massigen Cesteine, 2d ed.; Teall's British Petrograph; Spottswoode's Polarization of Light. Prerequisites: Chemistry 1, Metallurgy 2 (mineralogy and crystallography) elementary mineralogy. Five days, 1-4. Professor Bownocker.

20. **RESEARCH WORK.** Field, laboratory and library study in Inorganic or Historial Geology. Outline of work and time to be arranged with individual students. Three to five hours credit. Three terms. Preceding courses in Inorganic or Historical Geology are prerequisite. Professor Bownocker or Professor Prosser.

DEPARTMENT OF GERMANIC LANGUAGES AND LITERATURES

[University Hall, Rooms 30 and 32.]

PROFESSOR EGGERS, ASSOCIATE PROFESSOR MESLOH, MR. EISENLOHR, MISS BARROWS

The Department of Germanic Languages and Literatures is in charge of the instruction in German and some of the related languages and literatures. Courses in general philology are also offered by this department, such as the courses in Old High German, Gothic, Old Norse, History of the German Language, Comparative Grammar, Sanskrit, etc. The object of the instruction in this department is a four-fold one First, to enable the student to read German scientific works; second, to make the student familiar with the best in Germanic literatures; third, to acquaint the student with the laws governing the growth and developmnet of languages, special attention being given to Germanic languages; the fourth object, combining in a measure the preceding three, is to prepare instructors both for secondary and higher institutions of learing. Incidentally it might be stated that students looking forward to higher academic positions should possess of the ancient languages at least a fair nowledge of Latin.

The University library offers good facilities for the work in this department. In addition the department is supplied with a large number of illustrated books which are used to give the student a vivid picture of German life, customs, etc. A number of lectures illustrated by lantern slides are given.

1. **ELEMENTARY GERMAN.** Four times a week, three terms. This course is intended not only to lay a good foundation for the further study of German but also to help in forming proper habits of study. Sec. I: M., Tu., Th., F., at 10; Associate Professor Mesloh. Sec. II; M., Tu., Th., F., at 10; Mr. Eisenlohr. Sec. III: M., T., Th., F., at 11; Mr. Eisenlohr. Sec. IV: Tu., W., Th., F., at 2; Mr. Eisenlohr. Sec. V: Tu., W., T., F., at 3; Miss Barrows.

2. **SCIENCE READING.** Two or four times a week, three terms. This course includes a topical review of the grammar, a study of stem groups for the purpose of developing and increasing the student's vocabulary, and the reading of Gore's Science Reader, Walter's Meereskunde, Trabert's Meteorologie and some book or books dealing with the specialty chosen by the student. Sec. I: M., T., W., Th., at 8; Mr. Eisenlohr. Sec. II: M., Tu., W., Th., at 9; Associate Professor Mesloh.

4. **INTERMEDIATE GERMAN.** Four times a week, three terms. First term: Review of the Grammar; rapid reading of a number of novels. Second and third terms: Outlines of German Literature; Lyrics and Ballads; Composition. Sec. I: M., Tu., Th., F., at 10; Professor Eggers. Sec. II: M., Tu., Th., F., at 11; Associate Professor Mesloh.

9. **CLASSICAL DRAMA AND PROSE.** Three times a week, three terms. First term. After a rapid review of the development of the German drama from earliest times, special attention is given to the dramas of Lessing, Schiller, Goethe. In the second and third terms the development of German prose is studied, with special attention to the prose of Luther, Lessing, Goethe, Heine; Composition. Must be preceded by Courses 1 and 4. M., W., F., at 2. Professor Eggers.

10. **MODERN PROSE AND DRAMA.** Three times a week, three terms. First term: Some of the great prose-writers of Germany and of other Germanic countries will be studied. The second and third terms will be devoted to the study of the modern drama of Germany and other Germanic countries; Composition. Must be preceded by Courses 1 and 4. M., W., F., at 2. Professor Eggers. [Omitted in 1902-1903.]

11. **FAUST I AND II.** Twice a week, three terms. The consent of the professor in charge will have to be secured. Students are expected to take both parts. Must be preceded by at least Courses 1 and 4. T., Th., at 11. Professor Eggers.

12. **COLLOQUIAL EXERCISES.** Once or twice a week, three terms. This course is designed especially for teachers. Some lectures upon methods of teaching German will be given toward the close of the course. M., F., at 11. Professor Eggers.

13. **DEUTSCHER AUFSATZ.** Once a week, three terms. This course is designed specially for teachers. Original compositions will be written. Th., at 2. Professor Eggers.

14. **GOTHIC.** Twice a week, first term. This course is purely linguistic and aims to lay a good foundation for subsequent work in language. The relation between Gothic and later dialects is emphasized. Wright's Gothic Primer will be used. W., F., at 8. Associate Professor Mesloh. [*Omitted in 1902-1903.*]

15. **OLD HIGH GERMAN.** Three times a week, second term. A natural sequence to course 14. The attention of the student is not only directed to the archaic forms and syntax but also to the best literary monuments. Wright's Old High German Primer. M., W., F., at 8. Associate Professor Mesloh. [*Omitted in 1902-1903.*]

16. **MIDDLE HIGH GERMAN.** Three times a week, third term. Wright's Middle High German Primer. The poems of the Minnesingers, especially those fo Walther von der Vogelweide, and one of the mediæval epics will be studied, principally from a literary standpoint. M., W., F., at 8. Professor Eggers. [*Omitted in 1902-1903.*]

17. **OLD NORSE.** Twice a week, first term. Kahle's Altisländisches Elementarbuch. This course is intended as an introduction to the literature as well as the language. Some prose saga will be read. M., W., at 8. Associate Professor Mesloh.

18. **HISTORY OF THE GERMAN LANGUAGE.** Twice a week, second term. Behaghel's Die Deutsche Sprache. This course aims to give a sound knowledge of the historical development of the German language. W., F., at 8. Associate Professor Mesloh.

19. **COMPARATIVE GRAMMAR.** Twice a week, third term. Meringer's Indogermanische Sprachwissenschaft. Henry's Comparative Grammar of English and German. After a general survey of the whole field the relation between English and German is carefully studied. W., F., at 8. Associate Professor Mesloh.

20. **SANSKRIT.** Twice a week, three terms. Perry's Primer; Lanman's Reader. Lectures introductory to the study of Indogermanic philology. T., Th., at 8. Associate Professor Mesloh.

21. **PHONETICS.** Once a week, first term. A series of lectures discusses the nature of the various sounds of language, their production and interrelation. A knowledge of German is not essential for this course. M., at 8. Associate Professor Mesloh.

22. **DEUTSCHE KULTURGESCHICHTE.** Once a week, second and third terms. Tu., at 2. Professor Eggers.

23. **INTRODUCTION TO THE VEDA.** Three times a week, first term. Lanman's Reader. Hillebrandt's Chrestomathy. M., W., F., at 11. Associate Professor Mesloh. [*Omitted in 1902-1903.*]

24. **ELEMENTS OF PALI.** Three times a week, second term. Frankfurter's Pali Handbook. Reading of selections from the Jatakas and the Dhammapadam. This course must be preceded by Sanskrit 20. M., W., F., at 11. Associate Professor Mesloh. [*Omitted in 1902-1903.*]

25. **OLD PERSIAN.** Three times a week, third term. Jackson's Avesta Grammar and Reader. Spiegel's Altpersische Keilinschriften. This course must be preceded by Sanskrit 20. M., W., F., at 11. Associate Professor Mesloh. [*Omitted in 1902-1903.*]

29. **SEMINARY.** Two hours a week at one meeting. Hours to be arranged. Professor Eggers. [*Omitted in 1902-1903.*]

27. **GERMAN PHILOSOPHY.** Two times a week, three terms. Selections from the chief German philosophers will be read in the original. Open only to advanced students in philosophy. Professor Eggers.

DEPARTMENT OF GREEK LANGUAGE AND LITERATURE

[University Hall, Rooms 37, 29 and 28.]

PROFESSOR SMITH, ASSOCIATE PROFESSOR HODGMAN, ASSOCIATE PROFESSOR ELDEN

In addition to the University Library, students have access to a well-selected department library, containing the leading works of reference and special editions of Greek authors, and kept on the shelves in Room 28. Maps, charts, photographs and reproduction in plaster of works of ancient art add to the interest of the work. In Room 37 a stereopticon and about 250 lantern-slides are available for immediate use in any of the classes.

The requirements for admission to the advanced courses are as follows: Grammar, (Goodwin or Hadley-Allen), and Prose Composition (Collar and Daniell or an equivalent); or White's First Greek Book, or Gleason and Atherton's First Greek Book, each entire. Xenophon's *Anabasis*, three books.

It is believed that these requirements are quite within the reach of all high schools in which Greek is taught. At least two years of five periods a week should be devoted to the work. For the present, the Greek required for entrance may be begun at the University.

I. ELEMENTARY

ELEMENTARY GREEK — White's First Greek Book, and three books of Xenophon's *Anabasis*. Four times a week. (M., T., Th., F.) at 11 a. m. Associate Professor Elden.

This course is intended to meet the wants of those who lack the preparation for the advanced courses or those who wish, without pursuing the study further, to gain some acquaintance with the elements of the language.

II. ADVANCED COURSES

Students offering Greek as an admission language and desiring to pursue a classical course, are expected to select their work in Greek from the courses of study described below. Courses 7–12 inclusive cover the work of the first two years, and should be taken in their numerical order: from Course 13 on, students will have free election, under the general provision that they must be qualified to enter on the work.

7. **XENOPHON.** *Memorabilia* or *Hellenica*, until Thanksgiving: Greek Prose Composition for the rest of the term. First term, M., T., Th., F., at 11 a. m. Professor Smith.

8. **HERODOTUS.** Selections; with studies in Greek history, using either Myers or Botsford as a text-book. Second term, M., T., Th., F., at 11 a. m. Professor Smith.

9. **HOMER.** *Odyssey* (Perrin & Seymour.) Third term, M., T., Th., F. at 11 a. m. Professor Smith.

10. **LYSIAS.** Eight Orations (Morgan); with studies in Attic oratory and legal procedure. First term, T., Th., F., at 10 a. m. Professor Smith.

11. **PLATO.** *The Apology of Socrates*, *Crito*, and the narrative portions of the *Phaedo*. Second term, T., Th., F., at 10 a. m. Professor Smith.

12. **HOMER.** *Iliad.* Books I–IV (Seymour); with a literary discussion of the poem. Only those who have taken Course 9 or its equivalent will be admitted to this class. Third term, T., Th., F. at 10 a. m. Professor Smith.

13. **THUCYDIDES.** Book I (Morris) or VII (C. F. Smith). First term, M., W., F., at 3 p. m. Associate Professor Hodgman.

14. **DEMOSTHENES.** *Olynthiacs* and *Philippics.* Second term, M., W., F., at 3 p. m. Associate Professor Hodgman.

15. **GREEK LYRIC POETS.** (Tyler), or Theocritus (Kynaston). Third term, M., W., F. at 3 p. m. Associate Professor Hodgman.

16. **ATTIC TRAGEDY.** Lectures and collateral reading. First term, T., Th. at 3 p. m. Associate Professor Hodgman. [*Given biennially. Omitted in* 1903–1904.]

17. **SOPHOCLES AND EURIPIDES.** A play of each. Second term., T., Th. at 3 p. m. Associate Professor Hodgman. [*Given biennially. Omitted in* 1903–1904.]

18. **AESCHYLUS.** Discussion of the *Oresteia*, with reading of the *Agamemnon.* Third term, T., Th. at 3 p. m. Associate Professor Hodgman. [*Given biennially. Omitted in* 1903–1904.]

19. **EPIC POETRY.** Lectures; with reading of Hesiod's *Works and Days.* First term, M., W., F. at 2 p. m. Professor Smith.

20. **GREEK COMEDY.** Lectures; with reading of Aristophanes' *Clouds.* Second term, M., W., F. at 2 p. m. Professor Smith.

21. **POST-CLASSICAL GREEK.** Lucian's *Timon* and Dion Chrysostom's *Hunters of Euboea.* Third term, M., W., F. at 2 p. m. Professor Smith.

22. **ANCIENT ART.** Lectures on Greek and Roman architecture, illustrated by photographs and lantern slides. First term, twice a week. Professor Smith. [*Omitted in* 1902–1903.]

23. **ANCIENT ART.** Lectures on Greek and Roman sculpture, illustrated by photographs and lantern-slides. Second term, twice a week. Professor Smith. [*Omitted in* 1902–1903.]

24. **PRIVATE LIFE OF THE GREEKS.** Lectures and collateral reading. Third term, twice a week. Professor Smith. [*Omitted in* 1902–1903.]

25. **GREEK PHILOSOPHY.** Lectures; with reading of Xenophon's *Memorabilia* (other portions than in course 7). First term, T., Th., at 2 p. m. Professor Smith.

26. **PLATO.** The *Gorgias* or *Protagoras.* Second term, T., Th., at 2 p. m. Professor Smith.

27. **STUDIES IN NEW TESTAMENT GREEK.** Third term, T., Th., at 2 p. m. Professor Smith.

28. **HISTORICAL GRAMMAR.** This course deals, in lectures, with the principles that govern the development of the language and explain many apparent irregularities in Greek morphology. It is of special importance to those who expect to teach. Once a week through the year. Associate Professor Hodgman. [*Course 28 is given biennially. Omitted in* 1902-1903.]

DEPARTMENT OF HORTICULTURE AND FORESTRY

(Horticultural Hall.)

PROFESSOR LAZENBY, ASSISTANT PROFESSOR DAVIS

The department of Horticulture and Forestry has under its immediate control about twenty-five acres of land. About one-half of this area has been planted with numerous varieties of cultivated fruits. The remainder is devoted to market gardening. Students have an opportunity of observing all the operations carried on from the sowing of the seed and transplanting, to the harvesting and marketing of the crop. Among the facilities for instruction and illustration that deserve special notice are two vegetable forcing houses with packing rooms, tool rooms, etc. These houses are attached to Horticultural Hall, and are each one hundred and twenty feet long by twenty in width. They are heated by hot water. One interesting feature in the management of the forcing houses is the method of watering by sub-irrigation. This method had its origin in these houses and marks a great step in advance in green house management. Among the additional facilities provided for the illustration of the different courses in the department, and for practical training in the same are (1) orchards, (2) a small vineyard, (3) small-fruit plantations, (4) large vegetable gardens, with pipe-heated hot-beds, cold frames, conveniences for irrigation, experimental plats, etc.; (5) a small nursery and forest tree plantation, with practice rows for budding, grafting, pruning and training; (6) ornamental grounds and native woodland, containing a large variety of evergreen and deciduous trees and shrubs; (7) a green-house, with an extensive collection of exotic plants; (8) a collection of seeds, woods and other preserved natural specimens; (9) a collection of fruit in jars, also models of apples, etc.; (10) a laboratory well equipped with dry ovens, balances, seed testers, and other appliances for study and research; (11) a collection of horticultural hand tools for budding, grafting, pruning, etc.; (12) a small apiary of a dozen or more colonies of bees.

1. **ELEMENTS OF HORTICULTURE.** A study of the principles of plant growth and culture, including preparatory tillage, drainage, irrigation, weeds, insects, etc., in their relation to horticultural crops. Lectures and recitations and laboratory. Credit four and one-half hours. First term. M., Tu., W., at 9. Laboratory, Th. or F. afternoon.
2. **GREENHOUSE CONSTRUCTION AND MANAGEMENT.** A study of the different types of plant houses, including methods of heating, ventilating and watering. The crops of the vegetable forcing house and their management. Lectures and recitations and laboratory. Credit four and one-half hours. Second term. M., Tu., W., at 9. Laboratory, Th. or F. afternoon.
3. **PLANT PROPAGATION.** The theory and practice of multiplying plants by seeds, cullings, divisions, layers, budding and grafting. A study of special garden crops, including fertilizers, tools and implements. Transplanting, pollinating, and the use of insecticides and fungicides. Lectures and recitations and laboratory. Credit four and one-half hours. Third term. M., Tu., W., at 9. Laboratory, Th. or F. afternoon.
5. **VARIETIES OF CULTIVATED FRUIT.** A study of history, characteristics, adaptation and general qualities of orchard and garden fruits, including their commercial and food values. The judging and scoring of apples, pears, peaches, grapes, citrous and nut fruits. Lectures and recitations and laboratory. Credit four and one-half hours. First term. M., W., F., at 8. Laboratory, W. afternoon.

6. **PRINCIPLES OF FRUIT CULTURE.** A study of the location, tillage and fertilizing of orchards and gardens; the selection of varieties, laying out, planting and general management of fruit plantations, including diseases, insects and fungi; the use of insecticides and fungicides; harvesting, marketing and storing fruit. Lectures and recitations and laboratory. Credit four and one-half hours. Second term. M., Tu., Th., at 10. Laboratory, W. afternoon.

7. **SMALL FRUIT CULTURE.** A study of the varieties and methods of culture of the small or bush fruits. Practice in cross pollinating, judging and scoring of small fruits; the relation of bees and birds to horticulture; insect enemies, fungus diseases and the philosophy of spraying. Lectures and recitations and laboratory. Credit four and one-half hours. Third term, M., Tu., Th., at 10. Laboratory, W. afternoon.

8. **ELEMENTS OF FLORICULTURE.** A study of the origin, history, classification, general characteristics and development of ornamental plants. Lectures and laboratory. Credit two and one-half hours. First term Tu., at 8 or F., at 9. Laboratory, M. or Tu. afternoon.

9. **COMMERCIAL FLORICULTURE.** A study of the propagation and culture of ornamental plants, including the general management of plant houses, the marketing of cut flowers and bedding plants. Lectures and recitations and laboratory. Credit two and one-half hours. Second term. Tu., at 8, or F., at 9. Laboratory, M. or Tu. afternoon.

10. **AMATEUR OR HOME FLORICULTURE.** Including the study of window gardening and general management of house plants, the out-door flower garden and treatment of flower beds and borders. Lectures and recitations and laboratory. Credit two and one-half hours. Third term.

11. **ARBORICULTURE.** A study of native and introduced trees and shrubs; their use for timber, ornament, shade, shelter and hedges; methods of propagation and culture. Lectures, laboratory and field work. Credit two and one-half hours. First term. Th., at 8. Laboratory and field work, F. afternoon.

12. **SYLVICULTURE AND FORESTRY.** A study of the influence of forests upon soils, crops and climates; forestry in Europe; value of trees for timber; establishment and management of small plantations of forest trees; how to improve and extend existing woodland. Lectures and laboratory. Credit two and one-half hours. Second term. Th., at 8. Laboratory, F. afternoon.

13. **LANDSCAPE GARDENING.** A study of the art of producing picturesque-like or landscape effect; the making of lawns, walks and drives, and the correct planting of trees, shrubs and flowers for external adornment of home and public grounds. Lectures and practicum. Credit two and one-half hours. Third term. Th., at 8. Practicum, F. afternoon.

DEPARTMENT OF INDUSTRIAL ARTS

[Office, Hayes Hall, Room 2.]

PROFESSOR SANBORN, ASSISTANT PROFESSOR KNIGHT, MR. CROWE

The shops, which occupy the north wing of Hayes Hall, afford excellent facilities for instruction in both the practical details and the underlying principles of carpentry, pattern-making, forging, moulding, foundry work and machine work.

The carpenter and pattern shop is equipped with twenty-five benches with complete sets of carpenter tools for each and a large number of special tools for general use, twenty-three pattern-maker's turning lathes, with cupboards containing the necessary turning and pattern-making tools under each, and eight-foot pattern-maker's lathe with compound rest, a pony planer, a buzz planer, a circular rip and crosscut saw, a scroll saw, a 36-inch band saw, a trimmer and a power grindstone.

The forge shop is equipped with twenty stationary forges, with anvils and tools for each, a heating forge, a portable hand forge, a foot-power hammer, a blacksmith's drill and punch, shear and bar cutter. The blast for the forges is furnished through under-ground piping by a 45-inch Buffalo pressure blower, and the smoke is removed by a 55-inch Buffalo exhaust fan overhead. Both of these fans are driven by a 15-horsepower electric motor.

The foundry is equipped with a 24-inch Colliau cupola, the blast for which is furnished by a 30-inch Buffalo blower; two brass furnaces, one 16 inches in diameter and the other 20 inches in diameter; a core oven, benches for iron and brass moulding, core-making and cleaning of castings, a space for floor moulding 30 feet by 40 feet, besides all the necessary moulding tools, flasks, crucibles, ladles, tongs, etc.

The machine shop is driven by a 30 horse-power electric motor from above, and is equipped with the following tools: Twenty-eight benches for vise work, with complete set of tools: eight speed lathes, sixteen engine lathes, a Fox monitor turret lathe, two planers, two shapers, two milling machines, two upright drills, a sensitive drill, grinding machines for both plane and cylindrical surfaces, tool grinders, emery wheels, etc. This machinery is furnished with all the necessary tools, and the tool-room is equipped with full sets of drills, taps, dies, milling cutters, standard plugs, gauges, threads, micrometers and a great variety of special tools.

Hayes Hall is a large building of pressed brick and brown sandstone, completed and equipped at a cost of about $70,000. It is devoted to instruction in Industrial Arts, Drawing, Civil Engineering, Mechanical Engineering and Domestic Science. The central portion is three stories high and the front wings are two stories each. On the first floor are two offices, the rooms of the Department of Domestic Science and two lecture rooms; besides the machine shop, the forge shop and the foundry. On the second floor are the carpenter and pattern shops, and the Department of Civil Engineering, with private rooms annexed. The Department of Drawing occupies the third floor for instruction in mechanical and free-hand drawing and photography.

I. INDUSTRIAL ARTS

1. **TOOLS AND MACHINES.** Lectures and recitations on hand and machine tools and the principles underlying their construction and operation, and materials used in construction. Three credit hours. Tu., Th., S., 8. (First, second and third terms, third year, Courses in Industrial Arts and Manual Training; and second year, Short Course in Industrial Arts.)

2. **DESIGNING.** Problems in design, to accompany Course 1. Three credit hours, F., 1-4; S., 9-12. (Second and third terms, third year, Courses in Industrial Arts and Manual Training; second year, Short Course in Industrial Arts.)

3. **SHOP EQUIPMENT, APPLIANCES AND MANAGEMENT.** A continuation of Course 1. Lectures and recitations on the strength and durability of the materials used in construction; shop and factory buildings and their construction; power, power transmission and prime movers; automatic

machines and other special devices for turning out cheap and accurate work; methods of compensation and shop accounts and management. Three credit hours, M., W., F., 11. (First, second and third terms, fourth year, Course in Industrial Arts.)

4. **ADVANCED DESIGNING.** Problems in the design of buildings and the arrangement of machinery, line-shafting, etc., for manufacturing plants; to accompany Course 3. Three credit hours. (First and second terms, M., Tu., 1–4; third term, W., Th., 1–4; fourth year, Course in Industrial Arts.)

5. **WORKSHOP APPLIANCES.** Lectures and problems on the construction of shop buildings and the arrangement of machinery; power required and the means of transmission; friction in line-shafting and the efficiency of machinery; automatic machines and special shop appliances. Three credit hours. (Third term, fourth year, M., W., F., 8, Course in Mechanical Engineering.)

7. **MACHINE DESIGN.** Practical application of the principles of machine design. Three credit hours. (Third term, third year, M., Tu., 1–4, Course in Electrical Engineering.)

8. **MACHINE DRAWING.** Working sketches of mechanisms and machines from Measurement; detail and assembly drawing of same. Three credit hours. (First term, second year, W., Th., 1–4, Short Course in Industrial Arts.)

II. SHOPWORK.

NOTE — For time requirements, credit given, and all similar information concerning shopwork courses, see table on the following page.

3. **FOUNDRY WORK.** Exercises and practice in tempering sand and preparing moulds of machine parts in the sand, core-making, melting iron and brass and pouring castings.

4. **CHIPPING AND FILING.** Exercises and practice in vise work, including chipping in cast and wrought iron, surface filing, squaring, fitting, finishing, and the scraping of surface plates.

7. **CARPENTRY AND PATTERN MAKING.** Exercises and practice in carpentry, wood-turning and pattern making, including sawing, planing, mortising, splicing, framing and other work involving the use of the ordinary carpenter tools; center and chuck turning; the making of finished patterns; and enough elementary molding to illustrate draft, parting, cores, etc.

8. **CARPENTRY: CABINET WORK.** Exercise and practice in cabinet making, including panelling, mitre and dovetail joints, etc.; use of power tools.

9. **ADVANCED PATTERN MAKING.** Continuation of pattern work of Shopwork 7.

11. **FORGING.** The use and care of forge, fire and tools; practice in iron and steel forging, including such operations as cutting, bending, drawing, upsetting, shaping and welding iron; the making, hardening and tempering of steel punches, chisels and lathe tools.

12. **ADVANCED FORGING.** Various forms of welds in iron and steel; the use of scrolling irons and of forms for duplicating work; annealing; tool making; case-hardening; tempering drills, dies and cutters; spring making; ornamental iron work; visits to shops.

13. **MACHINE WORK.** Exercises and practice in hand-turning in iron and brass on speed lathes; in straight and taper turning, boring, fitting, chucking, and thread-cutting on engine lathes.

14. **MACHINE WORK.** Exercises and practice on the lathe, planer, shaper, drill press and milling machine, with use of small tools as drills, taps, dies, reamers, counterborers, etc.; construction of parts of actual machines.

15. **ADVANCED MACHINE WORK.** Exercises and practice on turret lathe, universal, surface and tool grinding machines; in gear cutting, etc.

16. **ADVANCED MACHINE WORK.** The construction and use of jigs and templates; the accurate laying out of work; the duplication of parts, the production of work rapidly and economically, etc.

17. **ADVANCED MACHINE WORK.** The making and use of special tools and fixtures, standard plugs and collars, standard caliper and limit gauges; error limits in modern machine construction; methods of testing the accuracy of machine tools, etc.

SUMMER TERM.

The Summer Term in Shopwork will begin on Monday morning preceding Commencement Day and continue for four weeks. The courses open to students are Shopwork (4), (7), (11), (13), (14) and (15), three credit hours in each.

Each course requires three hours a day for six days a week. Students electing the Electrical or Mechanical Engineering Courses are required to take two of the three courses, Shopwork (4), (7) and (11), at the close of their first year.

Students electing the Chemical Engineering Course are required to take Shopwork courses (7) and (11) at the close of their first or second year.

The courses are open as elective to students who desire to lighten their work of the regular terms, to make up back work or to take extra work.

SHOPWORK REQUIRED

Number	Credit hours	Subject	Year	Term	Hours	Courses in
3	2	Founding	2	1	Th. 1-5; or S. 8-12	Mech. Eng.
3	2	Founding	2	1	Tu. 1-5	Short Ind. Arts.
3	3	Founding	2	1	M. 2-4; Tu. 1-5	Ind. Arts; Manual Train.
4	2	Chipping and Filing	1	3	M. Tu. 1-3	Short Clayworking.
4	3	Chipping and Filing	2	1	F. 1-4; S. 8-11	Short Ind. Arts.
4	3	Chipping and Filing	...	...	(See Courses)	Elec. Eng.; Mech. Eng.
4	3	Chipping and Filing	4	1	M. Tu. 1-4	Ceramics.
4	3	Chipping and Filing	3	1	M. Tu. 1-4	Ind. Arts.
4	3	Chipping and Filing	3	1	M. Tu. Th. 10-12	Manual Train.
7	2	Woodworking	2	1	M. F. 10-12	Mining Eng.
7	3	Woodworking	1	1	M. Tu. 1-4	Short Ind. Arts.
7	3	Woodworking	2	1	W. Th. 1-4	Manual Train.
7	3	Woodworking	2	1	F. 1-4; S. 8-11	Ind. Arts.
7	3	Woodworking	...	...	(See Courses)	Chem., Elec. and Mech. Eng.
8	3	Cabinet work	2	3	M. Tu. 1-4	Ind. Arts; Manual Train.
9	3	Adv. Pattern work	1	2	M. Tu. 1-4	Short Ind. Arts.
9	3	Adv. Pattern work	2	2	M. Tu. 1-4	Ind. Arts; Manual Train.
9	3	Adv. Pattern work	...	...	(See Course)	Mech. Eng.
11	3	Forging	...	...	(See Courses)	Chem., Elec. and Mech. Eng.
11	2	Forging	2	2	M. F. 10-12	Mining Eng.
11	3	Forging	2	2	F. 1-4; S. 8-11	Ind. Arts; Manual Train.
11	3	Forging	1	3	M. Tu. Th. 10-12	Short Ind. Arts.
11	3	Forging	1	3	M. Tu. 1-4	Short Mining.
11	3	Forging	1	3	W. Th. 1-4	Short Clayworking.
11	3	Forging	3	3	W. Th. 1-4	Ceramics.
12	3	Adv. Forging	2	3	F. 1-4; S. 8-11	Ind. Arts; Manual Train.

Shopwork Required — Concluded

Number	Credit hours	Subject	Year	Term	Hours	Courses in
13	3	Machine work	2	2	M. Tu. 1-4; or W. Th. 1-4; or F. 1-4; S. 8-11	Elec. Eng.
13	3	Machine work	3	2	M. Tu. 1-4	Manual Train.
13	3	Machine work	3	2	M. Tu. Th. 10-12	Ind. Arts.
13	3	Machine work	2	2	W. Th. 1-4	Short Ind. Arts.
13	3	Machine work	2	3	M. Tu. 1-4; or F. 1-4; S. 8-11	Mech. Eng.
14	3	Adv. Machine work	3	1	M. Tu. W. 8-10; or Th. F. S. 8-10	Elec. Eng.
14	3	Adv. Machine work	3	1	M. Tu. Th. 8-10; or M. Tu. 1-4	Mech. Eng.
14	3	Adv. Machine work	2	3	Th. F. 1-4	Short Ind. Arts.
14	3	Adv. Machine work	3	3	M. Tu. Th. 8-10	Manual Train.
14	3	Adv. Machine work	3	3	M. Tu. 1-4	Ind. Arts.
15	3	Adv. Machine work	4	1	F. 1-4; S. 8-11	Ind. Arts; Manual Train.
15	4	Adv. Machine work	3	2	M. Tu. Th. F. 10-12; or Th. 2-4; F. 1-4; S. 9-12	Mech. Eng.
16	3	Adv. Machine work	4	2	M. W. F. 8-10	Ind. Arts; Manual Train.
17	3	Adv. Machine work	4	3	M. T. 1-4	Ind. Arts.

DEPARTMENT OF LATIN LANGUAGE AND LITERATURE

[University Hall, Rooms 28, 29, 37 and 39]

PROFESSOR DERBY, ASSOCIATE PROFESSOR HODGMAN, ASSOCIATE PROFESSOR ELDEN

At least five units of preparatory Latin are required for admission to this department. Courses 1, 2 and 3 must precede all elective work in Latin, and courses 4, 5 and 6 must precede or accompany other elective courses in this department.

1. **CICERO:** De Senectute and De Amicitia, or Selected Letters. Four times a week. First term. Sec. I: M., Tu., Th., F., at 10; Associate Professor Elden. Sec. II: M., Tu., Th., F., at 11; Professor Derby. Sec. III: Tu., W., Th., F., at 2; Associate Professor Hodgman.

2. **LIVY:** Book 1, 2, 21 or 22. Four times a week. Second term. Sec. I: M., Tu., Th., F., at 10; Associate Professor Elden. Sec. II: M., Tu., Th., F., at 11; Professor Derby. Sec. III: Tu., W., Th., F., at 2; Associate Professor Hodgman.

3. **HORACE:** Odes. Four times a week. Third term. Sec. I: M., Tu., Th., F., at 10; Associate Professor Elden. Sec. II: M., Tu., Th., F., at 11; Professor Derby. Sec. III: Tu., W., Th., F., at 2; Associate Professor Hodgman.

The aim of courses 1, 2 and 3 is to give the student practice, at first, in pronunciation, in exact and idiomatic translation, together with a ready and intelligent command of the common constructions in Latin. Later, more attention is paid to the order of words, to the interpretation of the text and, in the third term, to mythology and prosody.

4. **PLINY:** Selected Letters. Three times a week. First term. Sec. I: Tu., Th., F., at 10; Professor Derby. Sec. II: Tu., Th., F., at 11; Associate Professor Hodgman.

5. **TACITUS:** Germania and Agricola. Three times a week. Second term. Sec. I: Tu., Th., F., at 10; Professor Derby. Sec. II: Tu., Th., F., at 11; Associate Professor Hodgman.

6. **TERENCE:** Phormio; Plautus, Trinummus or Captivi. Three times a week. Third term. Sec. I: Tu., Th., F., at 10; Professor Derby. Sec. II: Tu., Th., F., at 11; Associate Professor Hodgman.

The instruction in courses 4, 5 and 6, without neglecting the lines of the preceding work, pays more attention to the style and literary merit of the authors studied, and to the subject-matter as a contemporary record of Roman thought and life.

7. **TACITUS:** Historiæ or Annales. Three times a week. First term. [Omitted in 1902–1903.]

8. **JUVENAL:** Satires. Three times a week. Second term. [Omitted in 1902–1903.]

9. **MARTIAL:** Selected Epigrams. Three times a week. Third term. [Omitted in 1902–1903.]

10. **PLAUTUS:** Menaechmi and Rudens. Three times a week. First term. Tu., Th., F., at 10; Associate Professor Hodgman.

11. **CICERO:** De Finibus or De Officiis. Three times a week. Second term. Tu., Th., F., at 10. Associate Professor Hodgman.

12. **SENECA:** Medea, De Vita Beata, De Providentia, De Tranquillitate Animi. Three times a week. Third term. Tu., Th., F., at 10; Associate Professor Hodgman.

13. **CICERO:** De Natura Deorum. Three times a week. First term. [Omitted in 1902–1903.]

14. **LUCRETIUS:** De Rerum Natura. Three times a week. Second term. [Omitted in 1902–1903.]

15. **HORACE:** Satires. Three times a week. Third term. [Omitted in 1902–1903.]

16. **HORACE:** Epistles. Three times a week. First term. M., W., F., at 3; Professor Derby.

17. **SUETONIUS:** Divus Julius and Divus Augustus, or Tacitus, Annals. Three times a week. Second term. M., W., F., at 3; Professor Derby.

17a. **LATE LATIN.** Three times a week. Third term. M., W., F., at 3. Professor Derby.

Courses 7–17 and 27 are intended to give facility in translation, an acquaintance with several important Latin authors, and that familiarity with the vocabulary, idioms, grammar and literature of the language which comes only from extensive reading.

18. **TEACHERS' COURSE.** Three hours credit. M., W., at 8; Assistant Professor Elden. This course is designed especially for students who intend to teach Latin and is open only to those who have completed courses 1–6 inclusive. First term: Cæsar; lectures, private reading, practical exercises in syntax, assigned topics in military antiquities. Second term: Cicero; lectures on Roman oratory and style, rapid reading of selected orations, assigned topics on Roman life and political antiquities. Third term: Vergil; lectures, studies in versification with especial reference to the diction and hexameter of Vergil, interpretation of selected portions of the text.

19. **LATIN PROSE COMPOSITION.** Twice a week. Three terms. [Omitted in 1902–1903.]

20. **ANTIQUITIES.** Twice a week. Three terms. Tu., Th., at 8; Professor Derby. Roman private life will be studied during the first term; attention will be given to such topics as the family, education, dress, food, the house, trade and industries, books, travel, etc. The second and third terms will be devoted to political and legal antiquities including finance and provincial administration.

21. **LATIN LITERATURE.** Twice a week. First and second terms. [Omitted in 1902–1903.]

22. **LATIN PHILOLOGY.** Twice a week. Third term. [Omitted in 1902–1903.]

23. **LINGUISTICS AND INSCRIPTIONS.** Twice a week. Three terms. Associate Professor Hodgman.

This course treats in lectures of the growth of Latin sounds and inflections. There will be collateral reading of inscriptions and from Quintilian.

24. **ADVANCED LATIN WRITING.** Twice a week. Three terms. [Omitted in 1902–1903.]

25. **PRO-SEMINARY.** Three hours credit. Tu., Th., at 9; Assistant Professor Elden. Principles of textual criticism and methods of independent research. The work for 1902–1903 will consist of the textual and exegetical study of selected Satires of Horace, combined with the more rapid reading of other portions of the text, and will be supplemented by lectures upon the history and development of Roman Satire. Special topics will be assigned to the student for investigation and report. This course should be preceded or accompanied by course 18.

26. **PHARMACEUTICAL LATIN.** The aim of this course is to give the student, in addition to the necessary command of forms and construction, a good knowledge of Latin terms used in pharmacy and medicine, with some facility in reading and writing prescriptions in Latn. Throughout the year. Four hours credit each term. Assistant Professor Dye. Tu., W., Th., F., 8–9. Room 13, Chemical Hall.

27. **OVID :** Fasti. Once a week. Three terms. Associate Professor Hodgman.

28. **HISTORICAL LATIN GRAMMER.** Once a week. Three terms. Associate Professor Elden. [Omitted in 1902–1903.]

DEPARTMENT OF LAW

[University Hall.]

PROFESSORS HUNTER, RANDALL, KINKEAD, PAGE, SHAUCK, COLLINS AND KNIGHT.

FIRST YEAR.

FIRST SEMESTER.

Elementary Law (including Domestic Relations, Status and Personal Property). Text-books: Robinson, Walker, tenth edition, and Blackstone and Tiffany's Persons and Domestic Relations.

SECOND SEMESTER.

Agency (Mechem); Contracts; Criminal Law (Hawley); Sales (Tiedeman); Torts (Cooley).

SECOND YEAR.

FIRST SEMESTER.

Bailments (Hale); Commercial Law (Tiedeman); Evidence (Greenleaf, sixteenth edition); Pleading (Phillips and Kinkead's Selections); Moot Court.

SECOND SEMESTER.

Evidence; Partnership (Mechem); Pleading; Real Property (Tiedeman); Wills (Page); Moot Court.

THIRD YEAR.

FIRST SEMESTER.

Constitutional Law (Black); International Law; Private Corporations (Taylor); Municipal Corporations (Tiedeman); Equity Jurisprudence (Merwin); Probate Law (Kinkead); Moot Court.

SECOND SEMESTER.

Private Corporations; Ethics (Sharswood); Federal Practice; Mortgages; Suretyship (Baylies); Quasi-Contracts; Trial Practice (Kinkead); Moot Court.

DEPARTMENT OF MATHEMATICS

[University Hall, Rooms 39, 41, 43 and 45.]

PROFESSOR BOHANNAN, ASSOCIATE PROFESSOR MCCOARD, ASSOCIATE PROFESSOR BOYD, ASSISTANT PROFESSOR ARNOLD, ASSISTANT PROFESSOR SWARTZEL, ASSISTANT PROFESSOR KUHN, MR. RASOR.

Students intending to make mathematics a specialty, should elect in the first year courses 31, 32, 33, 24; in the second year, courses 41, 42, 43; in the third year, courses 51, 52, 53, together with five hours a week from course 25; in the fourth year, ten hours a week from course 25. Such students should also make sure to acquire a reading knowledge of both French and German by the beginning of the third year.

Students intending to content themselves with less mathematics will take in the first year courses 21, 22, 23, and in the second year course 28.

The mathematical library of the university is one of the most extensive in the West, having sets of the principal mathematical journals of England, France, Germany and America, together with an extensive list of treatises in English, French, German and Italian on the chief mathematical topics. It is a working library of high merit and presents exceptional opportunities for advanced work.

1. **ELEMENTARY ALGEBRA.** Venable. Five credit hours. (First term, first year, M., T., W., Th., F. 9. Short Course in Clay-working.)

2. **ELEMENTARY ALGEBRA.** Wentworth. Five credit hours. (First, second and third terms, M., T., W., Th., F. 9, first year. Short Courses in Mining and Industrial Arts.)

3. **PLANE GEOMETRY.** Venable. Five credit hours. (First term, first year, M., Tu., W., Th., F. 11. Short Courses in Mining and Industrial Arts.)

3a. **PLANE GEOMETRY.** Venable. Five credit hours. (Second term, first year, M., Tu., W., Th., F. 8. Short Course in Clay-working.)

6. **ANALYTICAL MECHANICS AND STRENGTH OF MATERIALS.** Five times a week. Three terms. (Formerly courses 6 and 7 in Mechanical Engineering.)

11. **DIFFERENTIAL EQUATIONS.** Edwards. One credit hour. (First term, third year, F. 10. Course in Mechanical Engineering.)

13. **SOLID GEOMETRY.** Venable. Five credit hours. (Second term, first year, M., Tu., W., Th., F. 11. Short Courses in Mining and Industrial Arts.)

20. **INTEGRAL CALCULUS.** Edwards. Five times a week. Third term.

21. **COLLEGE ALGEBRA.** Taylor's College Algebra. Three times a week, first term. Open to students having credit for the second entrance unit of algebra. (Students not able to present this second unit on entrance may make it up in college, but without college credit. Each term a class will be organized for this purpose.) Course 21 is given on M., W., F., at 9, 11 and 1. Professor Bohannan, Associate Professor McCoard, Assistant Professors Arnold, Swartzel, Kuhn, Mr. Rasor, Mr. Travis.

22. **PLANE TRIGONOMETRY.** Three times a week, second term. Open to students having credit for the first unit of entrance algebra and the first unit of entrance geometry. M., W., F., at 9, 11 and 1. Professor Bohannan, Associate Professor McCoard, Assistant Professors Arnold, Swartzel, Kuhn, Mr. Rasor, Mr. Travis.

23. **ELEMENTARY COURSE IN ANALYTICAL GEOMETRY AND CALCULUS.** Three times a week third term. Open to students having credit for entrance algebra and geometry and for course 22. (Students not prepared in the second unit of entrance geometry may make up the deficiency in a special class during the second term, but without college credit. See also note to course 21.) M., W., F., at 9, 11, 1. Professor Bohannan, Associate Professor McCoard, Assistant Professors Arnold, Swartzel, Kuhn, Mr. Rasor.

24. **PROBLEMS ON ALL PAST WORK.** Once a week for the year. Peterson's Problems in Geometry, with selected problems in algebra, trigonometry, analytical geometry and calculus. This course may accompany courses 21, 22, 23, or courses 31, 32, 33. Hours to be arranged. Professor Bohannan, Assistant Professor Kuhn.

28. **ANALYTICAL GEOMETRY AND CALCULUS.** Three times a week for the year. Open to students having credit for courses 21, 22, 23, or courses 31, 32, 33. Hours to be arranged. Professor Bohannan, Associate Professor McCoard, Assistant Professors Arnold, Swartzel, Kuhn, Mr. Rasor.

31. **COLLEGE ALGEBRA.** Taylor's College Algebra. Open to students having credit for entrance algebra. Five credit hours. (First term, first year. All four-year courses.) Twelve sections meeting daily at 8, 9, 11, 1 and 2. Professor Bohannan, Associate Professor McCoard, Assistant Professors Arnold, Swartzel, Kuhn, Mr. Rasor.

32. **PLANE TRIGONOMETRY.** Open on a credit for entrance algebra and for the first unit of entrance geometry. Twelve sections meeting daily at 8, 9, 11, 1 and 2. Five credit hours. (Second term, first year, M., Tu., W., Th., F. 8, 9, 11, 1 or 2. All four-year courses.) (Third term, first year, M., Tu., W., Th., F. 8. Short Courses in Industrial Arts and Mining.) Professor Bohannan, Associate Professor McCoard, Assistant Professors Arnold, Swartzel, Kuhn, Mr. Rasor.

33. **ANALYTICAL GEOMETRY.** Open on a credit for entrance algebra, the first unit of entrance geometry and for course 22 or 32. Twelve sections meeting daily at 8, 9, 11, 1 and 2. Five credit hours. (Third term, first year, M., Tu., W., Th., F. 8, 9, 11, 1 or 2. All four-year courses.) Professor Bohannan, Associate Professor McCoard, Assistant Professors Arnold, Swartzel, Kuhn, Mr. Rasor.

41. **CALCULUS.** Venable. Edwards. Five times a week first term. Open on a credit for courses 21, 22, 23, or for courses 31, 32, 33. Five sections meeting at 8, 11 and 1. Professor Bohannan, Associate Professors McCoard and Boyd, Assistant Professors Arnold, Swartzel, Kuhn.

For engineering students, hours as follows. Five credit hours. (First term, second year.)

M., Tu., W., Th., F. 1 — Course in Architecture.
" 8 — Course in Ceramics.
" 8 — Course in Chemical Engineering.
" 11 or 1 — Course in Civil Engineering.
" 8 — Course in Electrical Engineering.
" 8 — Course in Mechanical Engineering.
" 8 — Course in Mining Engineering.

42. Continuation of course 41. Second term, five times a week. For hours and courses see Course 41.

43. Continuation of course 42. Third term. Five times a week. For hours and courses see Course 41.

71. **MECHANICS.** Statics. First term. Open on credit for courses 41, 42, 43. Daily at 8, 9, 11. Five credit hours. (First term, third year, M., Tu., W., Th., F. 8, 9 or 11. Courses in Architecture, Ceramics, and Chemical, Civil, Electrical, Mechanical and Mining Engineering.) Associate Professor Boyd, Assistant Professor Swartzel.

72. Continuation of course 51. Strength of Materials. Kinetics. Five credit hours. (Second term, third year, M., Tu., W., Th., F. 8, 9, 11 or 2. Courses in Architecture, Ceramics and Chemical, Civil, Electrical, Mechanical and Mining Engineering.)

73. Continuation of course 52. Kinetics. Hydraulics. Five credit hours. (Third term, third year, M., Tu., W., Th., F. 8, 9 or 11. Courses in Architecture, Ceramics, and Chemical, Civil, Electrical, Mechanical and Mining Engineering.)

25. **HIGHER MATHEMATICS.** From one to ten hours a week may be selected from the following courses:

(a) Determinants.
(b) Modern Geometry.
(c) Modern Higher Algebra.
(d) Advanced Analytical Geometry (Plane).
(e) Advanced Calculus.
(f) Space Analytics.
(g) Differential Equations.
(h) Theory of Equations.
(i) Higher Plane Curves.
(j) Groups.
(k) General Function Theory.
(l) Elliptic Functions.
(m) Potential Function.

(n) Spherical Harmonics.
(o) Mathematical Electricity.
(p) Mathematical Optics.
(q) General Mathematical Physics.
(r) Higher Geodesy.

Hours to be arranged. Professor Bohannan.

DEPARTMENT OF MECHANICAL ENGINEERING

[Office, Hayes Hall, Room 11.]

PROFESSOR MAGRUDER, PROFESSOR HITCHCOCK, ASSISTANT PROFESSOR JUDD, MR. BAILEY, MR. YOST.

The lectures and recitations of this Department are held in rooms Nos. 11 and 12 of Hayes Hall, and in the lecture room of the Mechanical Hall. Mechanical Hall is a brick building, 93 feet front by 32 feet deep, with a wing 32 by 80 feet. The lecture room is on the second floor, and is provided also with drawing tables. The main floor has three large rooms. The Museum is fitted with glass cases which contain the more delicate apparatus, measuring machines and other instruments of precision, samples of engineering supplies and specimens of materials which have been tested and broken either in the laboratory or in practice. It also contains a collection of models of mechanisms and valve gears.

The south laboratory is used for applied mechanics and for gas engineering. Here are located the machines for testing the strengths and elasticities of engineering materials, and recording their physical properties automatically and autographically. Oils are tested as lubricants. The gas engine plant has three engines, using gas, gasoline or oil. These illustrate three methods of ignition, and fly ball and inertia governors. The air may be supplied by a fan through a large meter. Measurements are taken of the temperatures and pressures of the air, gas and water used. The fresh and burnt gases are analyzed and their heating values determined by a calorimeter. The power is measured with both the indicator and the brake. The laboratory machine shop and tool room are in this room.

3. **MECHANISM.** Lectures and recitations on the principles of mechanism and mechanical movements. Five credit hours. (Second term, third year, M., Tu., W., Th., F. 8 or M., Tu., Th., F. 10, S. 8. Courses in Electrical and Mechanical Engineering.

The accurate laying out of movements, embodying the principles of mechanism. Two credit hours. (Third term, third year, M., Tu. 1–3. Course in Mechanical Engineering.) Professors Hitchcock and Sanborn.

12. **EXPERIMENTAL ENGINEERING LABORATORY.** Calibration of pressure gauges and indicator springs; steam engine indicator practice and oil testing. Two credit hours. (First term, third year, M. or W. 1–5. Course in Mechanical Engineering.) Professor Hitchcock, Assistant Professor Judd, Mr. Bailey.

14. Continuation of course 27. Four credit hours. (Second term, fourth year, M., T., 1-5; or W., T., 1-5. Course in Mechanical Engineering.) Professor Hitchcock, Assistant Professor Judd, Mr. Bailey.

15. Continuation of Course 14. Testing of steam boilers, injectors, steam, centrifugal and power pumps, pulsometer and hydraulic rams. Three credit hours. (Third term, fourth year, M., Tu. 9–12; or Th., F. 9–12. Course in Mechanical Engineering.) Professor Hitchcock, Assistant Professor Judd, Mr. Bailey.

17. **EXPERIMENTAL ENGINEERING.** Practice in the testing of materials of construction, calibration of orifices and weirs, study of the flow of liquids and gases, accompanied by lectures and recitations on laboratory practice, steam engines, boilers and power transmission. Three credit hours. (Second term, fourth year, Th. 11, F. 1–5. Course in Civil Engineering.) Professor Hitchcock, Assistant Professor Judd, Mr. Bailey.

18. **MACHINE DESIGN.** Recitations on Unwin's Machine Design, with lectures on American practice. Five credit hours. (Fourth year, first term, M., Tu., W., Th., F. 11, Course in Chemical Engineering; M., Tu., W., Th., F. 9, Course in Mechanical Engineering; second term, M., Tu., W., Th., F. 11, Courses in Chemical and Mechanical Engineering.) Professor Magruder.

19. **MACHINE DESIGN.** Practical applications of the principles of machine design. Five credit hours. (Third term, fourth year, M. 1–5, Tu., W. 1–4. Courses in Chemical and Mechanical Engineering.) Professor Magruder.

21. **THESIS WORK.** Five credit hours. (Third term, fourth year. Course in Mechanical Engineering.) Professors Magruder and Hitchcock.

22. **TIMBER AND MASONRY.** Lectures on the construction of foundations and structures in timber and masonry. Three credit hours. (The last three-fifths of second term, third year, M., Tu., W., Th., F. 9. Courses in Industrial Arts and Mechanical Engineering.) Professor Magruder.

23. **MATERIALS OF CONSTRUCTION.** Lectures on the materials used in architectural and building construction, and laboratory exercises on their properties. Four credit hours. (First term, fourth year, M., Tu. 10; F. 1–5. Course in Architecture.) Professor Hitchcock.

24. **EXPERIMENTAL ENGINEERING LABORATORY.** Aranged to meet the needs of those desiring to elect advanced laboratory work. Three credit hours. (First and second terms. Elective to third and fourth year engineers.) Professor Hitchcock, Assistant Professor Judd, Mr. Bailey.

25. Continuation of Course 17. Tests of steam, power, rotary and centrifugal pumps; water motor and turbine wheel. For those not having had Course 17, laboratory practice in testing of pressure gauges, indicator springs, steam engine indicator practice, testing of steam engines and valve setting; steam, power and centrifugal pump tests and boiler fuel trials, accompanied by lectures and recitations on power transmission, steam engines and boilers. Five credit hours. (Third term, fourth year, Tu., Th., 10, M., Tu., 2-5; or Tu., Th., 10, W., Th., 1-4. Courses in Ceramics, and in Civil and Mining Engineering.) Professor Hitchcock, Assistant Professor Judd, Mr. Bailey.

27. Continuation of Course 12. Testing materials of construction, steam engine, hot air engine and air compressor tests, transmission and absorption dynamometer trials and testing of belts. Five credit hours. (First term, fourth year, W., Th., 11, 11, 1–5; or M., F., 11, 11, 1–5. Course in Mechanical Engineering. Professor Hitchcock, Assistant Professor Judd, Mr. Bailey.

28. **EXPERIMENTAL ENGINEERING LABORATORY.** Testing materials of construction, transmission and absorption dynamometer tests, testing of lubricating oils. Two credit hours. (Third term, third year, Th. or F., 1-5. Course in Electrical Engineering. First term, fourth year, Th., 1-5. Course in Industrial Arts. Third term, fourth year, F., 1-5, Course in Manual Training.) Professor Hitchcock.

29. Continuation of Course 28. Testing of pressure guages and indicator springs, steam engine indicator practice and steam engine trials. Three credit hours. (First term, fourth year, Tu., Th., 1-4. Course in Electrical Engineering.) Two credit hours. (Second term, fourth year, W., 1-5. Course in Industrial Arts.) Professor Hitchcock.

30. Continuation of Course 29. Steam engine and boiler trials, steam and power pump tests and hydraulic experimentation. Two credit hours. (Second term, fourth year, S., 8-12. Course in Electrical Engineering. Third term, fourth year, F., 1-5. Course in Industrial Arts.) Professor Hitchcock.

31. **HYDRAULIC MACHINERY.** Recitations and lectures on pumping machinery. Three times a week. (Third term, fourth year, Tu., Th., S., 8. Course in Mechanical Engineering.) Professor Hitchcock.

32. **MECHANICAL ENGINEERING OF POWER PLANTS.** A descriptive study of steam and gas engines, boilers, pumps, injectors and other machinery used in plants generating power. Five credit hours. (Third term, third year, M., Tu., W., Th., F., 9. Courses in Chemical and Electrical Engineering and Industrial Arts; M., Tu., W., Th., F.,11. Course in Mechanical Engineering. Third term, fourth year, M., Tu., W., Th., F., 9. Course in Manual Training.) Professor Magruder.

33. **STEAM ENGINES AND BOILERS.** A detail study of steam using and steam generating machinery. Five credit hours. (First term, fourth year, M., Tu., W., Th., F., 8. Courses in Electrical and Mechanical Engineering.) Professor Magruder.

34 **THERMODYNAMICS.** Lectures and recitations on the transmissions of heat and mechanical energies in steam, gas and air engines, and in air and ammonia compressors, together with a study of the tests of ideal and actual engines and of their indicator diagrams; the flow of gases through pipes and orifices. Five credit hours. (Second term, fourth year, M., Tu., W., Th., F., 8. Course in Mechanical Engineering.) Professor Magruder.

35. **EXPERIMENTAL ENGINEERING LABORATORY.** Five credit hours. (Second term, fourth year, M., 9, M., Tu., 1-5. Option in Course in Chemical Engineering.) Professor Hitchcock, Assistant Professor Judd, Mr. Bailey.

DEPARTMENT OF METALLURGY AND MINERALOGY

[Office, Chemical Hall, Room 5.]

PROFESSOR N. W. LORD, MR. SOMERMEIER.

The Department of Metallurgy and Mineralogy occupies the eastern part of Chemical Hall. In the basement are the smelting furnaces, the assay laboratory, a room for rough work, and store rooms for supplies. On the first floor is the lecture room of the professor in charge, a laboratory with desks for sixteen students, a store room, a balance room, a private laboratory and office.

The metallurgical laboratory has all the appliances for the most modern methods of technical analysis as practiced in iron and steel laboratories, including gas analysis. A large room in the basement is fitted for gold and silver assaying, with improved muffle and melting furnaces, sampling apparatus and assay balances.

The lecture room in metallurgy has a projection lantern with a large collection of views of machines, mines, and furnaces. There is a photographic room with blue-printing facilities, where students make copies of drawings used in illustrating the lectures.

A collection of minerals and rocks with a large set of rock sections is provided for illustrating the mineralogy, as well as sets of blow-pipe apparatus for the students in determinative mineralogy.

2. **MINERALOGY.** Lectures arranged so as to be preparatory to Determinative Mineralogy (Course 3). Three credit hours, M., W., F., 11. (Third term, second year, Courses in Chemical and Mining Engineering; third year, Course in Ceramics.) Professor Lord.

3. **DETERMINATIVE MINERALOGY.** Laboratory course in practical determination of minerals by physical and chemical tests. Each student is furnished with a set of apparatus, and works under an instructor's inspection. Brush's *Determinative Mineralogy* is used as a manual. Five credit hours. Third term, third year, M., Tu., W., 1-4. Course in Mining Engineering.) Professor Lord and Mr. Somermeier.

4. **METALLURGY.** A course of lectures upon fuel and its uses, iron and steel, copper, lead, gold and silver, their properties, tests, ores and details of the models of reduction. The lectures are supplemented by a careful study of references to standard works and journals. Five credit hours. M., Tu., W., Th., F., 9. (First and second terms, third year, Courses in Mechanical and Mining Engineering and Industrial Arts; and fourth year, option in Course in Chemical Engineering. First term, fourth year, Course in Ceramics.) Professor Lord.

5. **METALLURGICAL LABORATORY.** Lectures and laboratory work. Laboratory practice in the analysis of iron and steel, fuel and slags, and the assay of lead, copper and zinc ores by wet methods, using approved methods as practiced in technical laboratories of metallurgical work. Course 5 must be preceded by Chemistry 7. Five credit hours, W., Th., F., 1-4. (First, second and third terms, second year, Course in Mining Engineering. First term, third year, Course in Chemical Engineering.) Professor Lord and Mr. Somermeier.

6. **ASSYING.** Laboratory work. Practical work in the assaying of gold, silver and lead ores, by furnace methods. Five credit hours. (Second term, third year, M., Tu., 11, 1-5. Courses in Chemical and Mining Engineering.) Professor Lord and Mr. Somermeier.

7. **METALLURGICAL CONSTRUCTION.** Practice in the designing of furnaces and other metallurgical machinery, including detail drawings and estimates. Three credit hours. (Second term, fourth year, Th., F., 1-4. Course in Mining Engineering.) Professors Lord and Ray.

8. **ORE DRESSING AND COAL WASHING.** Instruction in the methods of concentrating and enriching ores and fuels by mechanical means. Lectures, with reference to standard books and various papers in technical journals. Two credit hours. (First term, fourth year, Tu., F., 10. Course in Mining Engineering.) Professor Lord.

9. **MINERAL CHEMISTRY.** Lectures upon fire-damp, mine explosions, explosives, boiler waters, poisonous gases, iron ores; iron and steel, their properties and modes of manufacture; coal and coke. Five credit hours. (Third term, second year, M., Tu., W., Th., F., 8. Short Course in Mining.) Professor Lord.

DEPARTMENT OF MILITARY SCIENCE AND TACTICS

[The Armory.]

CAPTAIN GEORGE L. CONVERSE, U. S. A.

The same building used as a gymnasium is also employed as Armory and Drill Hall by the University Battalion. This is in charge of a Commandant from the United States Army, apart from whom it is officered entirely by the students. Since participation is required of all students during the first two years of their course, the size of the battalion is such as to make interesting maneuvers possible. Besides its military importance as shown by the prominent place taken by former students among the Ohio troops sent to the late war, the great value of this work in the physical development of the student is thoroughly recognized by all educators.

The drill begins with four hours per week in the first term, which is outside, weather permitting. The fall work is largely devoted to squad drill in the setting up exercises, facings, marching, etc., and company drill according to progress of the squads. In December the drill is reduced to two hours per week until April, with one hour additional for theoretical work. During these months drill is confined to work inside the Gymnasium, manual of arms, guard mounting and such ceremonies as can be performed within a limited space. From April 1st to the end of the term all work is outside, weather permitting, four days of each week as follows: Mondays, Company drill; Tuesdays, Battalion drill; Wednesdays, ceremonies other than guard-mounting and Thursdays, guard mounting and Company drill. During the entire year and on the same days as enumerated above, the O. S. U. Band either has its practice hour or takes part in ceremonies and drill. Similarly the Signal Corps belonging to the battalion exercises in the flag drill or at telegraph work.

1. **MILITARY DRILL.** Four times a week, from the opening of College till the Thanksgiving vacation; twice a week from Thanksgiving till April first; four times a week till the close of the college year. Required of all able-bodied male students during first and second years of their course.

2. **TACTICS.** Lectures and recitations. Twice a week. (Second term. Elective.)

4. **CUSTOMS OF THE SERVICE.** Lectures and recitations. Twice a week. (Second term. Required of the whole battalion.)

DEPARTMENT OF MINE ENGINEERING

[Office, Chemical Hall, Room 29.]

PROFESSOR RAY, MR. FORD.

This Department is equipped with all of the latest improved instruments and apparatus used in mine engineering, surveying and the study of mine ventilation. There is a collection of models of mine machinery and supplies, to which additions are being made which are valuable, as illustrations. The draughting room is large, well lighted and provided with a desk for each student, where he is personally taught the making of maps and the platting of actual surface and underground surveys; the making of drawings, tracings and blue-prints. He is also taught proper methods of keeping notes and all records necessary to an efficient engineer's office. The students are given practical experience by making actual surveys of coal mines and in working up their notes complete in all of the necessary details. The students are also taught how to make working drawings, plans, estimates and specifications of mining operations and equipment.

There is a large collection of views of machines, mines and mine equipment for use in the projection lantern in the lecture room. A photographic room with blue-printing facilities is used by the students in making copies of their own drawings and those illustrating the lectures.

The Mining Engineering Course pays special attention to underground surveying, mapping, timbering, ventilation and other matters relating to safety and speed, system and method in extracting coal and other minerals.

The coal mines of central Ohio are easily accessible to the University and furnish an extremely valuable field for illustrating the practical systems and methods of mine surveying, systems of mining, timbering, haulage, drainage and ventilation, tipple construction and general arrangement of mining plants.

During their course the mining students are required to make frequent trips and to spend sufficient time at the mines in actual work and observation to become familiar with practical mine surveying and the details of mine equipment and management. This work is further supplemented by visits to shops or public works, which afford practical illustrations of engineering work in the process of construction.

1. **MINE SURVEYING.** Lectures and field practice. This is similar to Course 4, but more elementary. The same text is used. The students have more practice in the drawing room. Five credit hours. (First term, second year, M., Tu., W., Th., F., 11. Short Course in Mining.)
2. **VENTILATION AND HAULAGE.** Lectures illustrated by experiment and maps of mines and models when possible, tests by safety lamps and anemometers, and methods of air distribution in coal mines. Five credit hours. (Second term, second year, M., Tu., W., T., F., 11. Short Course in Mining.)
3. **MINE OPERATING.** A course of lectures and practical instruction in mine bookkeeping and accounts, cost of working, etc., particularly adapted to Ohio coal mining. Five credit hours. (Third term, second year, Tu., Th., F., 10; M., 9-11. Short Course in Mining.)
4. **MINE SURVEYING.** Field practice in the use of instruments for surface and underground surveys. Full notes are taken and maps and plans made in the drawing room. Davies's Surveying by Van Amringe is used as a text-book. Five credit hours. (First term, third year, M., Tu., Th., F., 10; M., 1-3. Courses in Mining Engineering and Ceramics.)

5. **MINE ENGINEERING.** Lectures. Mine operating, mining machinery, ventilation, shaft-sinking, working out deposits, etc. Constant reference is required to the standard works and to the leading technical journals, with practice in designing mine plants, draughting and estimates. Five credit hours. (First, second and third terms, fourth year, M., Tu., W., Th., F., 8. Course in Mining Engineering.)

6. **PLANS AND SPECIFICATIONS.** Five credit hours. (Third term, fourth year, M., Tu., W., Th., F., 11. Course in Mining Engineering.)

7. **SURVEYING.** Practical experience in surveying in some mine convenient to Columbus; the time taken in one trip of not more than four consecutive days. One credit hour. (Second term, third year, Course in Mining Engineering.)

DEPARTMENT OF PHARMACY

[Office, Room 13, Chemical Hall.]

PROFESSOR KAUFFMAN, ASSISTANT PROFESSOR DYE.

The Pharmacy Department occupies the west wing, first floor of Chemical Hall.

The apartments consist of a large general laboratory, a smaller laboratory for advanced students, a dispensing room, reading room, lecture room, private laboratory and the office of the Dean.

The main laboratory will accommodate fifty students. Each desk is equipped with a very complete set of apparatus for individual use and special appliances are provided for general use. This laboratory is well provided with hoods, drying closets, steam pans, distilling apparatus, percolating racks, mills and indeed everything necessary to conduct the ordinary operations of Pharmacy.

The laboratory for advanced work is similarly provided except that the individual sets of apparatus vary according to the line of work being followed and the apparatus for general use (as for example the balances) is of the highest degree of accuracy. This laboratory will accommodate about twenty students.

The dispensing room is a completely equipped and well stocked drug store. The prescription desks are large enough to permit several students to work at one time, and a full complement of apparatus for the work of the dispensing counter is provided.

The prescription files are very complete and cover as far as possible the entire range of prescription practice.

In the reading room are kept the books of reference belonging to the department and such other books as may be drawn from the general library of the University for use during special investigation. Here also are to be found the pharmaceutical journals.

The lecture room is well supplied with apparatus and appliances for illustration and experiment. About the walls are arranged cases in which are kept sets of specimens illustrating processes of manufacture, specimens of rare, costly and curious drugs, and of official preparations. Here also is a complete set of specimens of official crude drugs arranged by number only, for practice in the "recognition of drugs."

6. **PHARMACY.** General pharmaceutical processes. Lectures three times a week. First term. Three hours credit. M., W., Fri., 9–10. Room 13, Chemical Hall. Professor Kauffman.

7. **PHARMACY.** United States Pharmacopœia official preparations. Lectures twice a week. Second term. Five hours credit. Lectures, M. and Wed., 9–10. Laboratory for students in Short Course, Th., F., 1–4. Laboratory for students in Long Course, Th., 10–12; Sat., 8–12. Rooms 12 and 13, Chemical Hall. Professor Kauffman and Assistant Professor Dye.

8. **DISPENSATORIES.** Official preparations. Lectures twice a week. Third term. Five hours credit. Lectures, M. and Wed., 9–10. Laboratory for students in Short Course, Th. and Fri., 1–4. Laboratory for students in Long Course, M., 2–4; Tu. and Th., 10–12. Rooms 12 and 13, Chemical Hall. Professor Kauffman and Assistant Professor Dye.

9. **PHARMACEUTICAL CHEMISTRY.** Unofficial preparations. The National Formulary. First term. Second year. Five hours credit. Lectures, Tu. and Th., 11–12. Laboratory, Tu. and W., 1–4. Rooms 12 and 13, Chemical Hall. Professor Kauffman and Assistant Professor Dye.

10. **EXTEMPORANEOUS PHARMACY.** Prescription practice. Lectures twice a week. Laboratory practice three times a week. Second term. Second year. Lectures, Tu. and Th., 11–12. Laboratory, M. and Tu., 1–4. Rooms 12 13, Chemical Hall. Professor Kauffman and Assistant Professor Dye.

11. **GENERAL PRACTICE.** Lectures twice a week. Dispensing and prescription practice. Third term. Five hours credit. Lectures, Tu. and Th., 11–12. Laboratory, M. and Tu., 1–4. Rooms 12 and 13. Chemical Hall. Professor Kauffman and Assistant Professor Dye.

12. **MATERIA MEDICA.** Official drugs and classification. Three times a week. First term. Three hours credit. Lectures, W., Th. and Fri., 9–10. Room 13, Chemical Hall. Assistant Professor Dye.

13. **MATERIA MEDICA.** Official and unofficial drugs. Three times a week. Second term. Three hours credit. Lectures and recitations. W., Th., Fri., 9–10. Room 12, Chemical Hall. Assistant Professor Dye.

14. **MATERIA MEDICA AND THERAPEUTICS.** Synthetic Products. Poisons and Antidotes. Three times a week. Third term. Three hours credit. Lectures and recitations, W., Th., Fri., 9–10. Room 12, Chemical Hall. Assistant Professor Dye.

15. **PHARMACEUTICAL ASSYING.** Five times a week. First term. Five hours credit. For time consult Professor in charge. Professor Kauffman.

16. **METHODS OF MANUFACTURE.** Five times a week. Second term. Five hours credit. For time consult Professor in charge. Professor Kauffman.

17. **GENERAL PHARMACY.** Two lectures, three laboratory periods a week. Third term. For time consult Professor in charge. Professor Kauffman.

DEPARTMENT OF PHILOSOPHY

[University Hall, Rooms 33, 49, 50 and 51.]

PROFESSOR SCOTT, ASSISTANT PROFESSOR HAINES, DR. DAVIES.

UNDERGRADUATE COURSES

15. **GENERAL PSYCHOLOGY.** Three times a week. First term. M., W., F., at 8. Dr. Davies.

16. **LOGIC.** Three times a week. Second term. M., W., F., at 8. Dr. Davies.

17. **ETHICS.** Three times a week. Third term. M., W., F., at 8. Dr. Davies.

Courses 15, 16 and 17 are intended for students in economics and sociology and for others who do not expect to devote more than one year to studies in philosophy, yet wish to include the three subjects of these courses. Those wishing to pursue advanced work in philosophy are advised to begin with Courses 18 and 19. Courses 15, 16 and 17 may be taken in the first year. The instruction is given by text-books, lectures, and collateral reading.

18. **GENERAL PSYCHOLOGY.** Three times a week. First and second terms. Sec. I: M., W., F., at 11; Professor Scott. Sec. II: M., W., F., at 9; Assistant Professor Haines.

19. **LOGIC.** Three times a week. Third term. Sec. I: M., W., F., at 9; Professor Scott. Sec. II: M., W., F., at 11; Assistant Professor Haines.

Courses 18 and 19 should be taken by students who expect to pursue advanced studies in Psychology or who wish to obtain a more thorough knowledge of Psychology than is afforded by Course 15.

Students who take Rhetoric 3 during the same year should enter Section II, in which Course 18 will follow Course 19.

The instruction is given by text-book, lectures and collateral reading.

20. **ETHICS.** Three times a week. First term. M., W., F., at 3. Professor Scott.

21. **HISTORY OF MODERN PHILOSOPHY.** Three times a week. Second and third terms. M., W., F., at 3. Professor Scott.

Courses 20 and 21 are open to students who have had Courses 18 and 19. In the former the nature and ground of right, the nature and authority of conscience, the nature and freedom of the will, the nature and ethical significance of desire, the various theories of the moral end, and the application of moral principles to the moral life, are the leading topics of discussion. In Course 21 the aim is to present a comprehensive view of the field and to trace the historical development of philosophic thought during the modern era. One thesis will be required each term.

22. **HISTORY OF ANCIENT AND MEDIEVAL PHILOSOPHY.** Three times a week. First term. M., W., F., at 3. Dr. Davies.

21. **HISTORY OF MODERN PHILOSOPHY.** Three times a week. Second and third terms. M., W., F., at 3. Professor Scott.

These Courses are open to students who have pursued either Courses 15, 16 and 17 or Courses 18 and 19. They are the only second-year Courses in philosophy open to students who have taken Courses 15, 16 and 17. For aim and methods see Course 21 above.

UNDERGRADUATE AND GRADUATE COURSES

23. **CONSPECTUS OF PHILOSOPHY.** Three times a week. First term. M., W., F., at 2. Professor Scott.

24. **THEORY OF KNOWLEDGE.** Three times a week. Second term. M., W., F., at 2. Professor Scott.

25. **METAPHYSICS.** Three times a week. Third term. M., W., F., at 2. Professor Scott.

Course 23 proposes a logical survey of the whole field of philosophy, determining the content, boundaries, and relations of its several departments, and investigating as far as time permits the conceptions and problems of each. It, with Courses 24 and 25, must be preceded by Courses 18 and 19, and it is desirable that they should be preceded or accompanied by Courses 20 (or 22) and 21. Külpe's Introduction to Philosophy or a similar book will be used as a text, with collateral use of Paulsen, Ladd and Stuckenberg.

Courses 24 and 25 constitute a continuous study in fundamental philosophy, the former concerning itself primarily with the subjective, and the latter with the objective, aspects of the problems considered. In the former the main topics will be the nature and laws of thought, the categories, the relations of thought and knowledge, of knowledge and belief, and of knowledge and reality. In the latter the special problem will be the nature of reality. This will lead to inquiries concerning substance, both matter and soul, cause, and God. Theses will be required during the year, not less than one for each term.

26. **ADVANCED PSYCHOLOGY.** Twice a week. Three terms. Tu., Th., at 9. Dr. Davies.

This course is intended for students who may wish to carry their study of systematic Psychology beyond the limits of the elementary Course 18. The purpose is to give the student facility in handling psychological questions in dependence upon the results of psychological inquiry. It will include during the first two terms an analytic and genetic treatment of selected topics; and in the third term the more important psychological theories will be presented and an attempt made to formulate a general theory of mental life. James' Principles of Psychology will be used as the basis of study.

27. **PHILOSOPHY OF SCIENCE.** Twice a week. Three terms. Tu., Th., at 2. Professor Scott.

Course 27 has for its purpose to investigate the postulates and concepts of physical science. It will include such subjects as casuality, mechanism and teleology, the existence and nature of matter and mind, the relation between them, and man's place in nature. Assigned readings, with reports and discussions, in Hume, Mill, Lotze, Spencer and others. One thesis will be required each term.

28. **PHILOSOPHY OF RELIGION.** Twice a week. Three terms. Tu., Th., at 2. Professor Scott.

This course includes a study of the nature of religion, the foundations of religious belief, the relations of philosophy to religion, and religious problems, such as the existence and nature of God, and problem of evil, and human immortality. Assigned readings, with reports and discussions, in Spinoza, Kant, Fichte, Schleiermacher, Lotze, Pfleiderer, Martineau and others. One thesis will be required each term. Courses 27 and 28 are alternative. Which of them will be given in 1902–1903 will be decided after consultation with the class.

29. **INTRODUCTION TO EXPERIMENTAL PSYCHOLOGY.** This is primarily a practice course. It aims to familiarize the student with the methods and some of the results of psychological experimentation. But its first aim is to advance him in the art of self-observation. The chief value of a psychological laboratory and the experimental conditions in psychology lies in the increased acquaintance with his own mind, which they bring to the

student. Philosophy 18 must precede, and Zoology 21 must precede or accompany this course. Titchener's Manual of Experimental Psychology will be used as a guide, beginning with an investigation of sensation. Near the end of the year, some short investigation may be undertaken. Lecture, one hour per week. Three times a week. Three terms. Tu., Th., at 2. Assistant Professor Haines.

30. **RESEARCH WORK IN EXPERIMENTAL PSYCHOLOGY.** Twice a week. Three terms. The psychological laboratory is open to students with suitable preparation to prosecute original investigations. The equipments in the laboratory and library, which are constantly increasing, make such work well worth the consideration of any student interested in the phenomena of mind. Philosophy 18 and 19 are required as preparation for this work. The arrangement of hours will be subject to the needs of the individual student. At least two hours must be taken. Hours to be arranged. Assistant Professor Haines.

31. **PLATO.** Twice a week. Three terms. Tu., Th., at 3. Dr. Davies.

32. **ARISTOTLE.** Twice a week. Three terms. Tu., Th., at 3. Dr. Davies.
Only one of these two courses will be given each year, but it will be Course 31 or 32, as the class may elect. The work will consist of readings from English translations of the author chosen and from commentaries and criticisms such as those of Grote, Nettleship, and Pater on Plato, and Grote, Lewes, Grant, and Davidson on Aristotle.

33. **DESCARTES AND SPINOZA.** Three times a week. First term. M., Th., F., at 10. Dr. Davies.

34. **LOCKE AND LEIBNITZ.** Three times a week. Second term. M., Th., F., at 10. Dr. Davies.

35. **BERKELEY, HUME, AND REID.** Three times a week. Third term. M., T., F., at 10. Dr. Davies.

36. **KANT, FICHTE, SCHELLING, AND HEGEL.** Three times a week. Three terms. Not offered in 1902–1903.
Courses 33, 34 and 35 constitute one year's work, and will alternate with Course 36. The first three are preparatory to the last and will be given in 1902–1903. Assigned portions of the leading works of the thinkers named will be studied and discussed, and an attempt will be made to obtain a clear conception of the author's system as a whole, and of his position on particular important problems of philosophy. One thesis will be required each term.

37. **LATER GERMAN PHILOSOPHY.** Three times a week. Three terms. M., Th., F., at 10. Assistant Professor Haines.
Following in historic order upon Course 36, this course will deal with the German successors of Herbart and Hegel, and with Herman Lötze and Gustav Fechner. Greatest stress will be placed upon Lötze and his successors in Germany and America.

38. **RECENT AND CURRENT PHILOSOPHY.** Three times a week. Three terms. M., Th., F., at 10. Assistant Professor Haines.
This course will be primarily concerned with the neo–Hegelian movement and its recent exponents in America and England. It will resolve itself into a study for present day idealism as set forth by its leading representatives in these countries. Three hours throughout the year. Only one of these courses (37 and 38) will be given in 1902–1903. Which one shall be given will be decided on consultation with the class.

39. **PSYCHOLOGICAL SEMINARY.** Two hours a week. Three terms. Hours to be arranged. Dr. Davies.

40. **ETHICAL SEMINARY.** Two hours a week. Three terms. Hours to be arranged. Professor Scott.

This course will be devoted in 1902–1903 to the historical and critical study of one or more of the great problems of ethics. The work will consist of assigned readings, papers, and discussions.

41. **PHILOSOPHICAL SEMINARY.** Two hours a week. Three terms. Hours to be arranged. Assistant Professor Haines.

This course for the year will be devoted to Epistemology. Hobhouse's Theory of Knowledge will be taken up at the beginnig of the year. At first members of the course will make reports on the author. Later each student will take up a special epistemological problem upon which he will be expected to report from time to time. The course is open only to students who have a good grounding in philosophy and feel that they have a special interest in the line of study offered. Two hours per week through the year. Hour of meeting to be agreed upon.

42. **COMPARATIVE AND ABNORMAL PSYCHOLOGY.** The aim of this course is to furnish a field of investigation that will prove fruitful to such students as have a desire to pursue psychologic studies further on the concrete side, after Philosophy 18. The consideration of abnormal mental phenomena will be of especial interest to prospective medical students. The whole course will be of service to any student of psychology by bringing definition and perspective into his views of normal mental phenomena. The exceptional facilities in Columbus, for studying abnormal mental phenomena will be utilized. Mercier's Sanity and Insanity will be read. Two hours, three terms. Hours to be arranged. Assistant Professor Haines.

43. **ADVANCED LOGIC.** Two hours a week. Three terms, This course will aim to develop symbolic logic along the lines of Veun and Schroeder. It will be of interest to scientific students as well as to those more especially interested in metaphysics. A part of the year will be given over expressly to a consideration of scientific method. M., W., at 3. Assistant Professor Haines.

44. **ADVANCED ETHICS.** Two hours a week. Three terms. Some of the subjects considered in Philosophy 20 will receive a more thorough examination, and some of the leading theories of ethics will be studied. It is open only to students who have had Courses 18, 19 and 20. Tu., Th., at 3. Professor Scott.

45. **AESTHETICS.** Two hours a week. Three terms. This course will consider the subject of the beautiful from three points of view. 1, Historical: This will deal with the origin and development of art products in their dependence upon social and economic conditions; 2, Psychological: A consideration of the nature of the art impulse in its individual and social aspects; 3, Philosophical: A discussion of the relation that the beautiful sustains toward the true and the good with a view to the formulation of a theory of the beautiful as part of a philosophical system. Hours to be arranged. Dr. Davies.

DEPARTMENT OF PHYSICAL EDUCATION

[The Gymnasium and Armory.]

PROFESSOR LINHART, DIRECTOR BERRYMAN, MR. HUDDLESON.

The Gymnasium is a large modern building, completed in 1898. The basement is used for lockers, dressing rooms and baths. The east end is used by the young women, the west end by the young men. Each end has separate shower and plunge baths.

The exercising floor, 80 x 150 feet, is thoroughly equipped with the best apparatus in duplicate. The running track is fourteen laps to the mile, with graded elevations at the curve to meet the requirements of the different rates of speed. The track is laid with felt an inch in thickness, three and a half feet wide and covered with rubber coated canvas.

The work is compulsory for the first and second year students, except those of the College of Law. The course consists of theoretical and practical work in the gymnasium, and includes calisthenics, light and heavy gymnastics, physiology of exercise, physical examinations and measurements. It is intended to give the student such a training in the methods of Physical Education that he may have a comprehensive knowledge of the subject.

1. **GYMNASIUM.** Monday, Tuesday, Wednesday and Thursday 4–5 P. M., from Thanksgiving vacation till the beginning of the third term. Required of all young men during the first and second years of their course.
2. **GYMNASIUM.** Monday, Tuesday, Thursday and Friday, fourth hour. Required of all young women during the first and second years of their course.
3. **GYMNASIUM.** Monday, Tuesday, Thursday and Friday, third hour. Required of all young women during the second year of their course.

DEPARTMENT OF PHYSICS

[University Hall, Rooms 10, 14, 23 and 24.]

PROFESSOR THOMAS, PROFESSOR COLE, ASSISTANT PROFESSOR KESTER.

The Department of Physics occupies the west half of the first two floors and basement of University Hall. The first floor rooms are the principal lecture room, fifty–five by thirty–eight feet; the elementary lecture room; an instrument room; and the office of the Department.

On the second floor are rooms for elementary laboratory work, and a dark room for photographic work, in connection with spectrum and Roentgen–ray apparatus. The lecture room on the first floor is also used in laboratory work. In the basement, provision is made for advanced exercises in electricity, heat, etc. The basement plan on an adjoining page gives a general idea of its arrangement, and of the character of the work provided for.

The Department has an excellent equipment of apparatus, to which additions are constantly being made. The apparatus includes a large collection of pieces for illustration of the general lecture room work, but is principally chosen for accurate measurement in the laboratory. A set of standards of length, capacity and mass, sent under the act of Congress supplying such sets to the several agricultural colleges, is in the possession of the Department. The pieces are copies of the United States standards made by the Coast Survey at Washington.

1. **ELEMENTARY PHYSICS.** Recitations and experimental lectures. Five credit hours. Text: Carhart & Chutes' "Elements of Physics." (First and second terms, first year, M., Tu., W., Th., F. 8, Short Course in Mining; M., T., F. 10; W., Th. 11, Short Course in Clay-working; and second year, M., T., F. 10; W., Th. 11, Short Course in Industrial Arts.)

2. **MECHANICS AND HEAT, ELECTRICITY AND MAGNETISM, SOUND AND LIGHT.** Lectures and experimental demonstrations. Three credit hours. Three terms. General course in the theory of physics. For students of the exact sciences. Requirement, the mathematics of the first year. Class, together, M., W. 9 to 10; 6 sections quiz F. 9 to 10. Professor Thomas.

3. **PROBLEMS.** Recitations. Twice a week. Three terms. Practice in the solution of physics problems. May be taken by those taking physics 2. Sec. I: Tu., Th. 9–10; Sec. II: Tu., Th. 9 to 10. Professor Thomas, Assistant Professor Kester.

4. **ELECTRICITY AND MAGNETISM.** Three times a week. First term. Theory of electricity and magnetism. M., W., F. 11 to 12. Professor Thomas.

5. **PHYSICAL LABORATORY.** Elementary manipulation. Length, mass and time measurements. Work in density, elasticity and in heat. Four credit hours. (Third term, second year, M., Tu. 1–4, W. 1–3; or W. 1–3, Th., F. 1–4. Course in Electrical Engineering.) (Alternative with Chemistry 20 and 21. First, second and third terms, third year. Course in Manual Training.)

6. **PHYSICAL LABORATORY.** Theory and practice of magnetic and electrical measurements, including the testing and standardizing of instruments; conductivity of conductors; insulation, capacity and resistance of insulated conductors and cables; temperature co-efficients; commercial measuring and testing instruments; strength and distribution of magnetic fields; magnetic moments, permeability; work in light, including optical constants; spectroscopy; photometry of gas, electric and other lights. Five credit hours. (First and second terms, third year, M., Tu., W. 1–4. Course in Electrical Engineering.)

7. **PHYSICAL LABORATORY.** (Two credit hours, second term, M., Tu. or Th., F. 1–3; three credit hours, third term; second year, M., Tu. or Th. F. 1-4. Course in Mechanical Engineering.) Three to five credit hours. (First, second and third terms. Elective.)

9. **PHYSICAL LABORATORY.** A second year's work in Physical Laboratory. Three to five credit hours. Course 9 must be preceded by Course 6 or Course 7. Elective.

11. **GENERAL PHYSICS.** One lecture. Two laboratory periods a week. Three terms. An elementary course for students who do not wish to do the more exact work of physics 2. The laboratory exercises are performed by the class in sections, each student in a section having a set of the necessary apparatus, and all working on the same experiment at the same time. Sec. I: Tu., Th. 8 to 10; Sec. II: Th., F. 2 to 4. Sections I and II: W. at 11. Professor Cole.

12. **LABORATORY.** Three to five times a week. Three terms. For those who have had, or who are taking physics 2. The work begins with measurements of length, mass, and time, and the study of instruments. Each student works alone. When sufficient skill in general manipulation has been acquired, the student is allowed much liberty in the selection of his work.

The apparatus provided is sufficient to permit him to work in any desired branch of physics. M., Tu., W. 1 to 4. Professor Cole, Assistant Professor Kester.

13. **LABORATORY.** Three to five times a week. Three terms. A second year's work in the laboratory. M., Tu., W. 1 to 4. Professor Thomas, Professor Cole, Assistant Professor Kester.

14. **THEORETICAL PHYSICS.** Lectures and assigned readings. Three to five times a week. Three terms. Graduate or advanced undergraduate course. Special hours on consultation. Professor Thomas, Professor Cole.

15. **LABORATORY.** Three to five times a week. Three terms. Research work. Special hours on consultation. Professor Thomas, Professor Cole.

DEPARTMENT OF RHETORIC AND ENGLISH LANGUAGE

[University Hall, Rooms 38, 40, 42, 44, 45.]

PROFESSOR DENNEY, ASSISTANT PROFESSORS GRAVES, MCKNIGHT, ALLEN.

I. RHETORIC AND COMPOSITION.

1. **PARAGRAPH WRITING AND ANALYSIS OF PROSE.** Twice a week through the year. The course includes two exercises weekly, in the writing of short themes, the outlining and composition of essays and speeches, and the study of illustrative texts for structure and form. Text-book, Scott & Denney's Paragraph Writing. Sec. I: M., Th., at 8; Sec. IV: Tu., F., at 8; Sec. VII: Tu., Th., at 9; Sec. VIII: Tu., Th., at 10; Assistant Professor Graves. Sec. II: M., Th., at 8; Sec. V: Tu., F., at 8; Sec. IX: Tu., Th., at 10; Sec. XII: Tu., Th., at 1; Assistant Professor McKnight. Sec. III: M., Th., at 8; Miss Ewalt. Sec. VI: Tu., F., at 8; Miss Williams. Sec. X: Tu., Th., at 10; Mr. McKinney. Sec. XI: M., F., at 11; Professor Denney.

2. **EXPOSITORY WRITING.** Twice a week, first term. In this course, practice is afforded in composing various types of the essay, specimens of which are analyzed by the class. Text-book, Buck and Woodbridge's Expository Writing. Course 2 must be preceded by course 1. Sec. I, II, III, IV, M. or Tu., and Th. or F., at 10, Professor Denney; Sec. V., Tu., F., at 11; Sec. VI., W., F., at 1, Assistant Professor Graves.

3. **BRIEF MAKING AND WRITTEN ARGUMENTATION.** Twice a week, second and third terms. The course includes a study of the principles of logical analysis, evidence, and argumentation; practice in writing briefs of noted speeches (Baker's Specimens); and in preparing original briefs with written arguments. Course 3 must be preceded by course 1. It is recommended that course 3 be preceded or accompanied by a course in logic, (Philosophy 16 or 19). Sec. I, II, III, IV: M. or Tu., and Th. or F., at 10, Professor Denney; Sec. V: Tu., F., at 11; Sec. VI: W., F., at 1, Assistant Professor Graves.

4. **SHORT STORY WRITING.** Three times a week. First term. Lectures on story construction, with plot-analysis of selected narratives and a study of their plan, purpose and diction; practice in composition, with individual and class criticism. Course 4 must be preceded by course 2. M., W., F., at 9. Professor Denney.

6. **POETICS.** Three times a week. Second term. Lectures on the history and theory of poetry; prescribed readings and reports; a study of English meters, with exercises in verse-writing to illustrate the principal forms. Text-book, Gummere's Handbook of Poetics, with Aristotle's Theory of Poetry for reference. Course 6 must be preceded by course 2. M., W., F., at 9. Assistant Professor Graves.

8. **THEORIES OF STYLE.** Three times a week. Third term. A discussion of Lewes's Principles of Success in Literature, and the essays on style by Spencer, DeQuincy, Arnold, Stevenson and Pater. Lectures on the Principles of Style. Course 8 must be preceded by course 2. M., W., F., at 9. Professor Denney.

10. **ADVANCED COMPOSITION.** Individual work is planned in this course for upper classmen who desire to continue practice in one or more of the forms of composition studied in preceding courses, or who seek criticism of articles intended for publication in newspaper or magazine. Each student will meet the instructor at stated periods for criticism and assignments. Course 10 may be undertaken at the beginning of any term. Credit one hour, limited to three terms. Sec. I: Tu. at 11; Sec. II: Th. at 11; Professor Denney.

12. **PROBLEMS IN RHETORIC AND CRITICISM.** Two hours a week, through the year. This course begins with a short series of lectures on the Development of Rhetorical and Critical Theory, after which each student undertakes the thorough investigation of some one problem in rhetoric and criticism, reporting results at the meeting of the seminary each week. Course 12 is designed for advanced undergraduates. It is open also to graduate students. Tu. 3 to 5. Professor Denney.

13. **THE TEACHING OF ENGLISH.** Once a week through the year. A discussion of principles and methods, plans for courses, and the reports of the English Conferences. Each member of the class will present a paper each term upon a subject assigned for investigation. Course 13 is open to advanced undergraduates and to graduate students. Tu., at 9. Professor Denney.

II. ENGLISH LANGUAGE.

15. **HISTORY OF ENGLISH AND DEVELOPMENT OF PROSE.** Twice a week through the year. Text-books, Emerson's Brief History of the English Language, and Garnett's English Prose. Tu., Th., at 9. Assistant Professor McKnight.

16. **OLD ENGLISH PROSE AND POETRY.** Twice a week through the year. Text-book, Sweet's Anglo-Saxon Reader. At first, attention will be paid to the purely linguistic features, the relations of Early English to the kindred Teutonic languages; later will be studied the beginnings of English literature in prose and poetry. M., W., at 9. Assistant Professor McKnight.

17. **BEGINNINGS OF ENGLISH STORIES.** Beowulf and minor Old English narrative poems studied in connection with the related epic and romantic stories in Norse and in early German. First term. Celtic (mainly Arthurian) story in English studied in connection with the related stories in Celtic and in French. Second term. English stories belonging to the Charlemagne cycle. Third term. Tu., Th., at 11. Assistant Professor McKnight.

18. **MIDDLE ENGLISH PROSE AND POETRY.** Twice a week through the year. First will be studied the development in sound and in orthography; later, the transition in literature, and the evolution of modern verse. Open to advanced undergraduates and to graduate students. Not offered in 1902–3.

GRADUATE COURSES.

20. **GRADUATE COURSES.** Under this number, courses are arranged at the beginning of each year to meet the needs of individual students desiring to pursue graduate work along either of two lines: (a) Rhetorical Theory and Criticism; (b) Old and Middle English Philology. Credit two to ten hours. Th. 4 to 6. Professor Denney, Assistant Professor McKnight.

III. PUBLIC SPEAKING.

21. **ESSENTIALS OF ORAL DISCOURSE.** Once a week through the year. Sec. I: M., at 8; Sec. II: M., at 9; Sec. III: M., at 1; Sec. IV: M., at 3; Sec. V: Tu., at 9; Sec. VI: Tu., at 3; Sec. VII: W., at 8; Sec. VIII: W., at 9; Sec. IX: Th., at 8; Sec. X: Th., at 9; Sec. XI: F., at 8; Sec. XII: F., at 10. Assistant Professor Allen.

22. **DECLAMATIONS.** Twice a week through the year. Tu., Th., at 10. Assistant Professor Allen.

23. **DEBATES.** Twice a week, first and second terms. Limited to twenty members. W. 3 to 5. Assistant Professor Allen.

24. **EXTEMPORE SPEAKING.** Twice a week. Third term. W. 3 to 5. Assistant Professor Allen.

25. **ORATORY.** Twice a week through the year. Analysis of noted orations; the writing and delivering of original orations. Limited to twenty members. Tu., Th., at 2. Assistant Professor Allen.

DEPARTMENT OF ROMANCE LANGUAGES AND LITERATURES

(University Hall, Rooms 35 and 34.)

PROFESSOR BOWEN, ASSOCIATE PROFESSOR BRUCE, ASSISTANT PROFESSOR BATCHELDER.

I. FRENCH.

NOTE — Courses 1 and 2 in French must precede all others, except Course 3.

1. **ELEMENTARY FRENCH.** Four hours a week throughout the year. Four sections, Grammar: Grandgent's Essentials. Reader: Whitney's (Parts I and II), or Laboulaye's Contes bleus, or Bowen's First Scientific French Reader; historical and narrative prose; one or more prose comedies. In this course the study of the language is taken up from the beginning. Stress is laid upon the acquisition of a correct pronunciation, after which the entire energy of the student is directed toward the attainment of a full and accurate reading knowledge of the language. Grammar and composition are made to contribute to this end. Sight reading is emphasized. Section I: M., Tu., Th., F., at 10, Associate Professor Bruce; Section II: M., Tu., Th., F., at 11, Professor Bowen; Section III: Tu., W., Th., F., at 2, Associate Professor Bruce; Section IV: Tu., W., Th., F., at 3, Assistant Professor Batchelder.

2. **MODERN FRENCH LITERATURE.** Four hours a week throughout the year. The study of literature as such is now taken up. The work of the year covers a survey of two or more of the following subjects: (1) Contes; (2) Novels (Balzac); (3) Lyric Poetry (Bowen's Modern French Lyrics or Canfield's French Lyrics); (4) Romantic Drama (Hugo). Prose Composition (Bouvet). Lectures supplement the work; private reading required; systematic attention given to syntax and idiom. Open to those who have completed course 1, or who have received credit for French as an entrance subject. Section I: M., Tu., Th., F., at 10; Assistant Professor Batchelder. Section II: M., Tu., Th., F., at 11; Associate Professor Bruce.

3. **SCIENCE READING.** Four hours a week throughout the year. M., Tu., W., Th. Herdler's Scientific French Reader and Luquiens' Popular Science, followed by other similar works. Prose Composition (Bouvet). A course introductory to the vocabulary of scientific literature. Intended solely for students of the College of Engineering, and required of all students in that College who offer French as their entrance language. Assistant Professor Batchelder.

4. **FRENCH COMEDY.** Three hours a week. First term. Study of the growth of French Comedy, with work centering upon Molière (three plays), Regnard and Beaumarchais. Lectures and collateral reading. M., Th., F., at 10. Professor Bowen.

5. **FRENCH TRAGEDY.** Three hours a week. Second term. Lectures and readings. Corneille, Racine and Voltaire. Critical study of Le Cid, Andromaque, Esther and Zaire. M., Th., F., at 10. Professor Bowen.

6. **SEVENTEENTH CENTURY PROSE.** Three hours a week. Third term. Critical study of Descartes, Pascal, Bossuet and others (Warren's Selections), supplemented by lectures. M., Th., F., at 10. Professor Bowen.

7. **ADVANCED PROSE COMPOSITION.** One hour a week throughout the year. Cameron's French Composition. Intended for advanced students who desire special training on the practical side of the language. Tu., at 10. Professor Bowen.

8. **LITERARY CRITICISM IN FRANCE.** Two hours a week. First term. Readings and lectures. Selections from Sainte Beuve, Faguet, Lemaitre and others. Alternates with course 11. Not offered in 1902–1903.

9. **RECENT FRENCH PROSE.** Two hours a week. Second term. Rapid reading with lectures. Critical study of some of the leading prose writers of the present, such as Bourget, Daudet, Loti, Zola and others. Alternates with course 12. *Omitted in* 1902–1903.

10. **PRACTICE IN SPEAKING AND WRITING FRENCH.** Based on Daudet's Stories. Two hours a week. Third term. Students wishing to elect this course must have the consent of the instructor in charge. Alternates with course 13. *Omitted in* 1902–1903.

11. **FRENCH TRAVEL-WRITERS.** Two hours a week. First term. Readings and lectures. Scenes of travel from Gautier, Hugo and Dumas. Tu., Th., at 9. Associate Professor Bruce.

12. **EIGHTEENTH CENTURY PROSE.** Two hours a week. Second term. Readings and lectures. Selections from Voltaire (ed. Cohn and Woodward) or others. Tu., Th., at 9. Associate Professor Bruce.

13. **ADVANCED CONVERSATIONAL PRACTICE.** Based on Stories of Coppée and Maupassant. Two hours a week. Third term. Students wishing to elect this course must have the consent of the instructor in charge. Tu., Th., at 9. Associate Professor Bruce.

14. **FRENCH SEMINARY A.** Three hours a week throughout the year. Open only to fourth-year students of Frnech, who have completed courses 1, 2, 4, 5, 6 and 7, or an equivalent. Given biennially. The subjects for the year 1902–1903 will be: (1) Lamartine and De Musset, and (2) Chateaubriand and the Precursors of Romanticism. Toward the close of the year several lectures will be given on Methods of Teaching French and the Teacher's Equipment. M., W., F., at 9. Professor Bowen.

15. **FRENCH SEMINARY B.** Three hours a week throughout the year. The same conditions as in course 14. Given biennially; not offered in 1902–1903. For 1903–1904 the subjects will probably be: (first half-year) French Literature before the Seventeenth Century, with special study of la Chanson de Roland, general survey of the Old French period, and critical study of Montaigne; (second half-year) the Development of the French Novel. M., W., F., at 9. Professor Bowen.

II. ITALIAN.

1. **ELEMENTARY ITALIAN.** Two hours a week throughout the year. Grammar (Grandgent's or Edgren's), and Bowen's First Italian Readings. Comedy (Goldoni), and introduction to Dante (selections from Inferno). Students contemplating this course are advised to postpone such election until they have completed French I, or its equivalent. M., W., at 1. Associate Professor Bruce.

III. SPANISH.

1. **ELEMENTARY SPANISH.** Four hours a week throughout the year. Grammar (Edgren's or Loiseaux's), and Reader; stories and plays; composition and conversation. M., T., Th., F., at 11. Assistant Professor Batchelder.

2. **ADVANCED SPANISH.** Two hours a week throughout the year. The modern novel; classical drama; Don Quixote; with lectures; advanced composition and conversation. Open to those who have completed course 1. T., Th., at 3. Professor Bowen.

DEPARTMENT OF VETERINARY MEDICINE

PROFESSOR WHITE, PROFESSOR FISCHER, PROFESSOR SISSON, ASSISTANT PROFESSOR BRUMLEY.

For class room work a large number of papier-machè models, wet and dry anatomical specimens, sample horse-shoes, charts, diagrams and drawings, surgical instruments and apparatus are constantly employed to supplement text-book teaching in all classes. The Veterinary Hospital, a plain brick building, affords excellent facilities for the care and treatment of diseased and injured animals, giving the students an opportunity to become familiar with and learn practically the maladies to which domesticated animals are subject. A drug dispensary and office with telephone are on the first floor front of the building. The upper floor is occupied by the house surgeon and two students selected from the senior veterinary class, who have immediate charge of the animals left for treatment. The

free clinic is held for two hours daily (Saturdays included) at this building. Inasmuch as from 1000 to 1500 animals are treated annually at this clinic, the students have ample opportunity to learn in a practical way the best methods of treating diseased and injured stock.

11. **VETERINARY ANATOMY:** Osteology. Lectures illustrated with skeletons and anatomical preparations. Dissections. Ten credit hours a week. First term.

12. **MYOLOGY, SPLANCHNOLOGY.** Practical dissections and demonstrations on cadavers. Ten credit hours a week. Second term.

13. **ANGIOLOGY AND NEUROLOGY.** Lectures illustrated by drawings, in the dissecting room, and on anatomical models. Ten credit hours a week. Third term. Books recommended for reference and study: Stranveway's Veterinary Anatomy (ew edition); Chauvau's Comparative Anatomy; McFaydean.

14. **GENERAL PATHOLOGY AND MORBID ANATOMY.** First term. Text-book: Green's Morbid Anatomy.

Instruction in General Pathology consists of lectures and recitations and is given to students of the second year. This course of study forms the foundation for Theory and Practice (Special Pathology), and embraces the study of the various disease processes.

The lectures are supplemented by demonstrations of museum specimens, and by post-mortem examinations upon all cases which die in the College Hospital. The processes especially studied are: Inflammation, Functional Disturbances, Fever, Anatomical Changes, Hyperæmia, Anæmia, Hemhorrhage, Thrombosis, Embolism, Degenerations, Tumors, Stones and Concrements. First term, five hours per week.

15. **THEORY AND PRACTICE OF VETERINARY MEDICINE.** Sporadic, non-infectious diseases. Five times a week. Second term.

16. **THEORY AND PRACTICE OF VETERINARY MEDICINE.** Five times a week. Third term.

17. **DISEASES OF THE COW.** Special course for students in Dairying. Lectures and demonstrations consisting in the following: (a) Anatomy of the cow with special references to the digestive, reproductive and milk producing organs; (b) The more common non-infectious diseases of these organs and their treatment; (c) Most important infectious and contagious diseases and methods of preventing and dealing with them; (d) Practical methods of administering medicines, securing during operations, casting, etc. Credit three hours. Second term. W., Th., F., at 9.

18. **SURGICAL DISEASES. INFECTIOUS AND CONTAGIOUS DISEASES.** Three times a week. Four terms. Text-books: Friêdberger and Froehner.

19. **CLINIC.** Lectures. Six times a week. Six terms.

21. **THEORY AND PRACTICE.** Lectures; illustrated by practical demonstrations, by drawings, on clinical cases. Head and neck. First term, third year.

22. **THERAPEUTICS.** Three times a week. Third term, third year.

23. **OBSTETRICS.** Five times a week. Third term, third year.

The course in Obstetrics is given during the third year, one term being devoted to this branch. The lectures, recitations and class-room demonstrations are amplified as much as possible by taking advantage of the clinical material afforded by an environing live-stock and dairying district.

Students have a particular advantage in coming in actual contact with cases of dystokia, fœtal, placental, and maternal, and are required to assist in all obstetrical operations upon animals in labor, under the direction of the instructors.

The College is supplied with all the obstetrical instruments and devices practically useful in such work, and the student is made thoroughly familiar with their use.

24. **GENERAL SURGERY.** Two times a week. First term, first year.

25. **PRACTICE IN OPERATING.** Three times a week. Second term, third year.

26. **HORSE SHOEING.** This subject is taught by a series of about fifty lectures, recitations and demonstrations upon prepared specimens and clinical cases, and embraces the following: The anatomy of the horse's foot; relationship of the outer skin to the foot; parts nurturing the horn; how horn grows; physiological mechanism of the foot; relationship of the foot to the rest of the limb and the influence of conformation over forms of hoofs; flight of feet; forms of hoofs; judging horses for shoeing; preparation of the hoof for the shoe; summer and winter shoes; fitting shoes to the hoof; nails; hoof nurture; shoeing for defective gaits; shoeing for lameness; shoeing for faulty conditions of the horny capsule; use of rubber pads, buffers, etc. First term, third year, three hours per week.

27. **MEAT INSPECTION.** Lectures and recitations. Three times a week. Second term, third year.

Thirty-six recitations and lectures are given on the subject of Meat Inspection. These lectures include the normal character of the various organs of the meat-producing animals; rules and regulations for the inspection before and after slaughter; diseases due to the infestation with animal parasites; diseases due to the infection with vegetable parasites; putrid meat; over-heated meat; emaciated meat; fœtal meat; natural death; abnormal odors and colorations of meat and fat; imperfect bleeding; disposition of diseased meat, etc.

As this course embraces much morbid anatomy, it is just as valuable to those who intend entering regular veterinary practice as to those who contemplate taking the civil service examination for meat inspectors in the Bureau of Animal Industry.

28. **VETERINARY ANATOMY.** Brief outline of the anatomy of the horse and ox. Lectures, recitations, clinical practice and demonstrations. Credit four and one-half hours. First term. M., Tu., W., at 8. Clinical practice Th. afternoon.

29. **VETERINARY PRACTICE.** The more common diseases of a non-infective character, to which farm animals are subject. Minor surgery, castration, and the principles of horseshoeing are included in this course. Lectures, recitations and practicum. Credit four and one-half hours. Second term. M., Tu., Th., at 10. Practicum, Th. afternoon.

30. **VETERINARY PRACTICE.** The most common infectious and contagious diseases affecting farm and dairy animals, and the most scientific methods of preventing, dealing with and treating the same. Lectures, recitations and practicum. Credit three hours. Third term. M., Tu., Th., at 10. Practicum, Th. afternoon.

31. **CANINE DISEASES.** Five times a week. Second term, third year.

This course is taught by recitations, lectures, and practical demonstrations in the daily clinics and on subjects anæsthetized for the operating table.

Supplementary lectures will be given on the origin and history of the dog, psychical characteristics, zoological position of the dog, with a comparison of the different breeds of dogs, their peculiarities, habits, etc. One term of five hours each week.

33. **OPTHALMOLOGY.** A short course of twenty lectures is given on diseases of the eye. This course includes: Methods of examining the eye; the use of the ophthalmascope; use of artificial and natural illumination; use of mydriatics; diseases and treatment of the organs surrounding and adjacent to the bulbus; diseases of the bulbus and their treatment. The lectures are supplemented by clinical demonstrations, and the students are given practice in the use of the most practical instruments for eye examinations. Third year, third term, two hours per week.

34. **PATHOLOGY LABORATORY.** Three times a week. Second and third terms, second year.

36. **PATHOLOGY LABORATORY.** Three times a week. First term, third year.

37. **TOPOGRAPHICAL ANATOMY.** Five hours, first term, second year.

These are laboratory courses supplemented by lectures. They consists of three laboratory periods per week for an entire year, beginning with the second term of the second year and ending with the first term of the third year. The student is taught the correct methods of making autopsies and how to judge correctly ante-mortem and post-mortem changes in the tissues.

The holding of autopsies, preservation of tissues, the preparation, staining, microscopical examination and description of pathological tissue sections is done by the student. This course also includes the study of ecto-andento-parasites and pathologic bacteriology.

*ELECTIVES.

(Students in the College of Agriculture and Domestic Science.)

Veterinary Medicine (11, 12, 13) 5. (Anatomy) first, second and third terms. Veterinary Medicine (14, 15, 16) (General Pathology and Theory and Practice). Five times a week throughout the year. This course should be preceded by Veterinary Medicine (11, 12, 13) 5 and by Physiology (1) 3. Veterinary Medicine (19) 3. (Horse, Cattle and Dog Clinic in the Veterinary Hospital.) First, second and third terms. Veterinary Medicine (21, 22) 3. (Infectious and contagious diseases). First and second terms. Veterinary Medicine (23) 3. (Obstetrics). Second term. Veterinary Medicine (26) 3. (Principles of Horseshoeing). Third term. Daily, including Saturdays, 10-12 M.

DEPARTMENT OF ZOOLOGY AND ENTOMOLOGY

[Biological Hall, Rooms 3, 4, 7, 8, 9 and Third Floor.]

PROFESSOR OSBORN, ASSOCIATE PROFESSOR HINE, ASSOCIATE PROFESSOR LANDACRE.

The Department occupies the first and third floors of the fine new Biological Hall providing two lecture rooms, one general and five special laboratories, museums, offices for professor and assistants, besides room for storage, work shops, aquaria, cold-storage, photography, etc. The laboratory equipment includes microscopes, microtomes, incubators, injectors, etc., for most approved methods of work in morphology, embryology and neurology. The collections include a fine series of skeletons, a number of large mammals, series of the birds of Ohio, of the birds of North America, of Ohio fishes, of mollusks and especially rich collections of insects particularly in Odonata, Hemiptera and Diptera.

The Zoological Museum is located on the ground floor of the wing of Biological Hall. The foundations of a zoological museum have been laid and the work

*Although the above electives are especially recommended, agricultural students who have had Anatomy and Physiology may elect any subject taught in the College of Veterinary Medicine.

begun on a generous plan. Every effort is being made to secure and preserve excellent specimens in all groups of animals. Not only the adult animals are preserved but the preparatory stages as well, their work and architecture, in fact all that can illustrate the life-history and habits.

Among special features are the Wheaton collection of birds of Ohio, numbering about 1,000 skins; a collection of North American birds, about 1,500 skins, representing very fully the North American fauna; a number of fine specimens of larger mammals, moose, hippopotamus, deer, tiger, peccary, lion, tapir, etc., most of which have been generously donated by Sells Brothers; a collection of about 3,500 molluscan shells; a fine series of Ohio fishes; numerous reptiles, amphibians, etc.

There is an excellent series of skeletons, crania and alcoholic material for courses in comparative anatomy.

The collection of insects is being rapidly enlarged and the purchase of the Kellicott collection of Odonata makes it especially rich in that order.

Professor Osborn's private collection of Hemiptera is deposited in the department and available to students for comparison and study.

The Department of Zoology and Entomology possesses a special library the nucleus of which was the scientific library of the late Professor Kellicott which was generously donated to the department. This has been increased by gifts of special papers by a number of the leading investigators of the country, and will be enlarged as rapidly as possible. The private library of the professor is also accessible for reference.

The courses in zoology are based on an elementary year's work, course 1, after which there is opportunity to diverge along lines of morphology, embryology and taxonomy. Students contemplating advanced work in these lines should take course 1 by the second year. For preparation for study of medicine, course 2, 19 and 20 or 21 are advised. For advanced experimental or research work preparation in chemistry, physics and botany is essential and ability to read scientific French and German should be acquired by the third year.

1. **INVERTEBRATE AND VERTEBRATE.** Open to first year students and preliminary to other courses. Three times a week. Invertebrate, first and second term; Vertebrate, third term. This course includes a general discussion of groups, dissection of types and an outline of classification. Lecture. Tu., Th., at 8, or M., F., at 10; Professor Osborn. Laboratory, Sec. I: Tu., 2 to 4; Sec. II: Th., 2 to 4; Sec. III: F., 2 to 4; Mr. ————.

2. **COMPARATIVE ANATOMY OF VERTEBRATES.** Must be preceded by course 1 or equivalent. Three or five times a week. Three terms. One hour quiz; two or four periods laboratory. Weidersheim's Comparative Anatomy of Vertebrates is used as a basis. Quiz., W., at 1; Laboratory, W., Th., F., 1-4. Associate Professor Landacre.

3. **ECONOMIC ENTOMOLOGY.** Insects of forest, orchard and garden. A detailed study of injurious species intended particularly for students of Horticulture. The work includes field studies, collections, reports on observation, etc. Lecture, recitations and laboratory. Credit two and one-half hours. Third term. Th., at 9. Laboratory, Th. afternoon.

4. **ECONOMIC ENTOMOLOGY.** Twice a week through the year. This course must be preceded by Course 1. A systematic study of the group of insects with special reference to injurious and beneficial species. A foundation is laid for special study in Entomology. Preparation of collections, essays, life history studies and use of remedial measures along with laboratory studies on general anatomy. Recitations, lectures and laboratory. Credit two and one-half hours. F., at 9. Laboratory, F. afternoon.

5. **ECONOMIC ENTOMOLOGY.** Insects of the household. Discussions of the different insects of importance in the household as injurious to food materials, clothing, carpets, draperies, etc. Fourth year; course in Domestic Science. Credit three hours. First term. M., W., F., at 11.

7. **SYSTEMATIC AND PRACTICAL ENTOMOLOGY.** Two lectures and one laboratory period a week. Third term. An elementary practical course for students in the Short Course in Agriculture.

8. **PARASITES OF DOMESTIC ANIMALS.** A lecture course devoted to the principal parasites affecting domestic animals intended especially to meet the needs of those who intend to give particular attention to stock raising. Once a week. First term.

9. **SPECIAL ENTOMOLOGY.** Studies of life histories, collection and classification in selected groups. Field work and lectures. Four periods each week. First term.

10. **SPECIAL ENTOMOLOGY.** Studies of winter conditions of insects. Insecticides, insecticide machinery, methods of preparing insect illustrations, greenhouse pets, etc. Four periods each week. Third term.

11. **SPECIAL ENTOMOLOGY.** Investigations of selected groups or species. Lectures on insect legislation, distribution, natural enemies, special methods of control, etc. Four periods each week. Third term.

Courses 9, 10 and 11 are intended as practical courses in entomological research adapted especially for those who wish to give special attention to this branch with reference to future work in Agriculture or Horticulture and to furnish a preparation for those who have in view work as entomological investigators in experiment stations or as teachers in agricultural schools. They may be taken as graduate courses if not elected earlier or continue as special lines of research during a graduate course embracing other special subjects.

12. **GROSS ANATOMY OF THE FROG.** Must be preceded by course 1. Three or five times a week. First term. Ecker's Anatomy of the Frog and Huxley and Martin's Practical Biology. Laboratory, W., Th., F., 1-4. Associate Professor Landacre.

13. **MINUTE ANATOMY OF THE FROG.** Must be preceded by course 1. Three or five times a week. Second term. Continuation of 12, but devoted particularly to a study of the tissues. Laboratory, W., Th., F., 1-4. Associate Professor Landacre.

14. **EMBRYOLOGY OF THE FROG.** Must be preceded by course 1. Three or five times a week. Third term. Laboratory, W., Th., F., 1-4. Associate Professor Landacre.

15. **INVERTEBRATE MORPHOLOGY.** I. Must be preceded by course 1. Three or five times a week. First term. Devoted to lower Invertebrates, especially Protozoa and Coelenterata, Parker and Haswell, Lang, McMurick, Shipley and other works are used for reference. Lecture, Tu., 2; Laboratory, M., Tu., W., Th., F., 2-4. Professor Osborn.

16. **INVERTEBRATE MORPHOLOGY.** II. Must be preceded by course 1. Three or five times a week. Second term. Will usually be devoted to Worms and Mollusks. References as in 15. Lecture, Tu., 2; Laboratory, M., T., W., Th., F., 2-4. Professor Osborn.

17. **INVERTEBRATE MORPHOLOGY.** III. Must be preceded by course 1. Three or five times a week. Third term. Usually devoted to Arthropoda. Above references and Packard's Text-book of Entomology. Lecture, Tu., 2; Laboratory, M., Tu., W., Th., F., 2-4. Professor Osborn.

18. **INVERTEBRATE EMBRYOLOGY.** Must be preceded by course 1. Three or five times a week. Three terms. Korschelt and Heider used as a basis. Lecture, Tu., 2; Laboratory, M., Tu., W., 1-4. Associate Professor Landacre.

19. **VERTEBRATE EMBRYOLOGY: KARYOKINESIS, ETC.** Must be preceded by course 1. Three or five times a week. First term. Hertwig, Marshall, Balfour, Minot, Foster and Balfour are used as references. Lecture, Tu., 1; Laboratory, M., Tu., W., 1-4. Associate Professor Landacre.

20. **VERTEBRATE EMBRYOLOGY: CHICK AND MAMMAL.** Must be preceded by course 1 and 19. Three or five times a week. Second and third terms. Foster and Balfour used as a guide. Lecture, Tu., 1; Laboratory, M., Tu., W., 1-4. Associate Professor Landacre.

21. **COMPARATITE NEUROLOGY.** Should be preceded by course 1 or equivalent, but is open to advanced students in psychology or pedagogy. Three or five times a week. Three terms. Includes study of brain and spinal cord in all classes of vertebrates. Edinger Lectures on the Central Nervous System is followed and numerous treatises and special papers consulted. Lecture, M., 1; Laboratory, M., Tu., W., 1-4. Associate Professor Landacre.

22. **CYTOLOGY.** Three or five times a week. Advanced course. Must be preceded by course 1 and equivalent of 2 or 15, 16, 17. Three terms. Hertwig, Cell and Tissues, and Wilson, The Cell in Development and Inheritance. Professor Osborn.

23. **ENTOMOLOGY.** Must be preceded by course 1. Three or five times a week. Three terms. Advanced practical course for those wishing to investigate some special groups of insects or to fit themselves for professional work in Entomology. Lecture, W., 1 or 2; Laboratory or field work, M., Tu., W., Th., F., 2-4. Professor Osborn.

24. **ORINTHOLOGY.** Twice a week. Three terms. Lecture and laboratory work on Morphology, Ecology and classification of birds. Laboratory, Tu., 9–11; Lecture, M., 10. Associate Professor Hine.

25. **RESEARCH WORK.** Advanced undergraduate or graduate course. Must be preceded by course 1. and the equivalent of 2 or 15, 16, 17 or 19 and 20. Five or ten times a week. Time arranged with individual students, or 9-12 and 2-5 through week. Professor Osborn.

ENROLLMENT

1901-1902

COLLEGE OF AGRICULTURE AND DOMESTIC SCIENCE

GRADUATE STUDENTS—2

Bogue, Earnest Everett, B. Sc., 1894; M. Sc., 1896 ..... Columbus
Fain, John Richard, B. Sc ..... Knoxville, Tenn.

UNDERGRADUATES—196

	Course	Course Hours	Credit Hours	Home Address
Adams, Charles Randolph	Agr.	211½	35½	Prairie Depot
Barrick, Robert Henry	Dairy	...	...	Columbus
Barth, Monetta Winfield	Dairy	...	...	New Bremen
Batterson, Annie Elizabeth	Dom. Sci.	205½	102½	Grand View
Beale, Harry Glenn, B. Sc	Agr.	...	...	Mt Sterling
Beattie, James Herbert	H. & F.	211½	47½	Zanesville
Belden, Herbert Lucius, B. Sc	Agr.	...	...	Middlefield
Bickham, Clifford Albert	Agr. (S.)	98	53	Huntsville
Biddison, Bertha Minnie	Dom. Sci. (S.)	94½	41½	Glouster
Blachley, Bertha	Dom. Sci. (S.)	94½	50½	Columbus
Booth, Robert Argyll	Dairy	...	...	Cloverdale, Va.
Bowman, Duiguid Abraham	H. & F.	211½	51½	Columbus
Bowser, Earl Levi	Agr.	211½	52	Archibald
Boynton, Frank J	Agr. S.	98	107	Haverhill
Breckler, Leo Ambrose	Agr. S.	98	145	Defiance
Breese, Clarence Nye	Agr. S.	...	105	Lima
Bugby, Morris O	Agr.	210½	159½	Kingsville
Case, Aubrey Edmund	Agr. S.	98	88	Hudson
Campbell, Clara Naomi	Dom. Sci.	205½	74½	Columbus
Clapp, Ernest Talbot	Agr. S.	98	143	Chatham
Clark, Herman Alfred, B. Sc	H. & F.	...	...	Medina
Clark, Ralph R	Dairy	...	...	Columbus
Clawson, Lucy Blanche	Dom. Sci.	205½	158½	Okeana
Clevenger, William Leander	Agr. S.	98	44	Fletcher
Coan, Fred Loence	Dairy	...	...	Swanton
Coberly, Edward D	H. & F.	211½	128+5	Georgesville
Cochran, George C	Dairy	...	...	Russelville
Coffman, Ada Catherine	Dom.Sci.S.	94½	59	Lewisburg
Crabb, George Arthur	Agr. S.	98	54	South Warsaw
Crabb, James Byrl	Agr.	210½	169½	Mt Sterling
Crabb, Floi Euphemia	Dom.Sci.S.	94½	44½	Mt Sterling
Crumrine, George Ray	Agr. S.	98	93	Nova
Dallas, John Thomas	Agr.	206	202+34	Columbus
Day, Albert Edward, B. Sc	Agr.	...	...	Mt Carmel
De Frees, Raymond G	H. & F.	211½	...	Troy
Dagenfelder, Joseph Charles	Dairy	...	...	Swanton
Demorest, H. R	Agr.	211½	112	
Demuth, Charles Alfred	Agr. S.	98	15	Waterville

	Course	Course Hours	Credit Hours	Home Address
De Vore, David	Agr. S.	98	...	Red Oak
Ditto, Theodore Walter	Agr.	210½	173½	Delphos
Doneghue, Ray Claude	Agr. S.	98	47	Columbia Station
Downs, Frank Isham	Agr.	211½	34½	Waterville
Dun, Hattie Franklin	Dom.Sci.S.	94½	82	Columbus
Dunlap, S. Arthur	Agr. S.	98	12	Williamsport
Dutton, Charles A	Dairy	...	...	Middleburgh
Ealy, Simon Peter	Dairy	...	...	Blacklick
Easton, Arthur Perry	Agr.	211½	51½	Springboro
Eckman, Otto Leo	Agr.	211½	87½+7	Winchester
Eichelberger, Floyd E	Agr.	211½	46½	Jeffersonville
Eisele, Bessye Thelma	Dom. Sci.	205½	46½	Columbus
Ellison, Andrew Winslow	Dairy	...	...	Ft Wayne, Ind.
Elzey, Charles Russell	Dairy	...	...	Waynesville
Ertel, Wilbur Aaron	Dairy	...	...	Oregonia
Estle, Fred	Agr.	211½	48½	Springfield
Fauver, Clare	Agr. S.	98	43	Ridgeville Corners
Fauver, Lorenzo Donaldson	Agr. S.	98	76	Ridgeville Corners
Ferguson, Ollie	Agr.	210½	139+1	Springfield
Finney, Elkana Elhana	Agr.	211½	50	Cedarville
Fippin, Edgar John	Agr. S.	98	37	Camp Chase
Florence, Walter Tuttle	Agr. S.	98	53	Plain City
Folsom, James Alfred	Agr. S.	98	108	Franklin Furnace
Foster, Chester Glenn	Agr.	211½	82½	London
Foster, Emma Warwick	Dom. Sci.	205½	135½	Higbys
Frank, John Nickolas	H. & F.	211½	100½	North Amherst
Freyre, Alexander	Agr. S.	98	...	Santa Fe, Argentine Republic
Glass, Frank Ingersoll	Dairy	...	...	Cold Spring, Ind.
Graber, Frank Howard	Dairy	...	...	Mt Eaton
Hagerman, Will Carlton	Agr. S.	98	68	Mansfield
Halverstadt, Clark J	Agr.	211½	51½	Leetonia
Hamilton, Frank Edward	Agr.	206	162	Brownsville
Hamilton, Henry Hoge	Agr.	211½	75½	Brownsville
Harter, Leslie Allison	Agr. S.	98	32	Delaware
Hatfield, Clifford Christian	Agr.	211½	117½	Lebanon
Hayes, Richard Miles	Dairy	...	...	Jefferson
Hiatt, Frank Waldo	Dairy	...	...	Gratiot
Hill, Mamie Faye, B. Sc. in	Dom. Sci.	...	...	Columbus
Hirsch, Frieda	Dom. Sci.	205½	52½	Columbus
Hitchcock, Lester Eugene	Dairy	...	...	Galena
Holl, Edgar David	Agr.	211½	45	New Berlin
Hollister, Ruth Amanda	Dom. Sci.	205½	100½	Galion
Holloway, Carrie	Dom.Sci.	Spec'l	95	Columbus
Hoover, Clarence Boal	Agr.	210½	148½	Columbus
Hoover, Susan Corwin	Dom.Sci.	Spec'l	86½	Columbus
Huddleson, Herbert	Agr. S.	98	75	Guilford, Ind.
Hudson, James Frank	Dairy	...	...	Wayland
Huenke, Clifford Victor	Dairy	...	...	New Bremen
Hyatt, Charles Daniel	Agr. S.	98	53	Augusta
Hyatt, James Vernon	Agr. S.	98	107	Augusta
Hyde, George C	Agr. S.	98	35	Warren
Hyde, Robert Linton	Agr.	211½	46½	Frankfort

	Course	Course Hours	Credit Hours	Home Address
Inskeep, Guy Hamilton	Agr. S.	98	41	Bellefontaine
Janeway, Mary Viola	Dom.Sci.S.	94½	27½	Columbus
Jefferson, John Howard	Agr. S.	98	91	Madison Mills
Jennings, Otto Emery	Agr.	210½	169+13	Olena
Jones, Lloyd	Agr.	210½	157+5	Columbus
Jossi, Gottfried	Dairy	...	...	Salem
Jotter, Ernest Victor	H. & F.	Special	90½	Monroe
Kauffman, Margaret, B Ph	Dom.Sci.	Spec'l	4	Columbus
Kellerman, Edna	Dom. Sci.	94½	45½	Columbus
Kumler, Edward Wayne	Dairy	...	...	Basil
Lanman, Faith Robinson	Dom. Sci.	205½	155½	Columbus
Lawson, James Williams	Dairy	...	...	Centreville
Long, Frank C	H. & F.	210½	146+8	West Sonora
Long, Jean Paul	Agr.	211½	110½	Columbus
Loomis, Charles Clarence	Agr.	211½	39½	Bowling Green
Lunn, Benjamin Vastine	Dairy	...	...	Columbus
Mangold, E. Frank	Agr.	Special	17½	Sonora
Mangum, Benedict Wyley	Agr. S.	98	57	North Benton
Mark, Clara Gould	Dom. Sci.	205½	102½	Columbus
Markel, Dora	Dom. Sci.	205½	40½	Kingston
Marshall, Ida, B. Sc. in	Dom. Sci.	...	...	Hemlock
Matthews, Bessie	Dom.Sci.S.	94½	49½	Sunbury
Meyers, Adah Lucy	Dom. Sci.	205½	95½	Columbus
Minns, Edward Russell	Agr.	211½	81	Lodi
Miskimen, Burt	Agr. S.	98	56	Plainfield
Morton, Charles Owen	Agr. S.	98	18	Burton
McClelland, Chester Arthur	Agr.	210½	169½	Terrace Park
McClimans, Nellie Rhoda	Dom.Sci.S.	94½	45½	Mt Sterling
McClintock, James Earl	Agr. S.	98	60	Summerfield
McKinley, Emma Evans	Dom. Sci.	205½	52½	Columbus
McMahon, Mary Gertrude	Dom. Sci.	205½	152½	Columbus
McMullen, Francis Patriot	Dairy	...	...	New Douglas, Ill.
McNutt, John Chester	Agr. S.	98	48	Kingsville
Nash, Dell Henry	Agr. S.	98	38	Mantua
Nichols, Anne Victorine	Dom. Sci.	205½	50½	Chillicothe
Nichols, Orra A	Agr. S.	98	79	Medina
Oberlin, Mary Lavina	Dom. Sci.	205½	57	Massillon
Oliver, Robert Evin	Agr.	211½	88	Chillicothe
Orebaugh, Ralph H	Agr. S.	98	...	Columbus
Oyler, Charles Edward	Dairy	...	...	Lithopolis
Palmer, Lee Buckland	Agr. S.	98	68	Reynoldsburg
Palmer, William Henry	Agr.	211½	51½	Thurston
Parker, Harvey Erastus	Dairy	...	...	Aurora
Petty, William Hazlett	Dairy	...	...	Pickerington
Pheneger, George Rudolph	Dairy	...	...	Tuolumne, Cal.
Pinkvoss, Dangers Rolf	Dairy	...	...	Camp Dennison
Poindexter, Charles Cardoza	Agr.	210½	159½	Parkersburg, W. Va.
Poston, Emerson Scott	Agr.	211½	74½	Haydenville
Quiroga, Modesto	Agr.	211½	120½	San Louis, Argentine Republic
Rowe, Harry Odell	Agr. S.	98	15	Belvidere, Ill.
Rubins, Frank	Agr.	211½	110½	Kenton

	Course	Course Hours	Credit Hours	Home Address
Ruhlen, La Motte, B. Sc. in Agr	.....	...	...	Plain City
Schaeffer, Freelan Wilbert, B. Sc. in Agr	.....	...	...	Columbus
Schmiesing, Benjamin F	Dairy	...	...	Minster
Shaw, Edward Lee, B. Sc. in Agr	.....	...	...	Newark
Shaw, Norman Ewing	Agr. S.	98	58	Nice
Sherman, Channell Howard	Dairy	...	...	Mt Vernon
Sherwood, Gertrude	Dom.Sci.S.	94½	49	Columbus
Shields, Jeannette	Dom.Sci.	Spec'l	73	Columbus
*Sigrist, John Larkins	Agr.	...	...	Congress
Sigrist, Lewis Marion	Agr. S.	98	43	Congress
Smith, Lindley M	Agr.	211½	54½	Chester Hill
Snell, John	Dairy	...	...	West View
Snow, Henry Preston	Agr.	211½	...	Urbana
Spahlinger, George Frederick	Agr.	211½	27	Windham
Spitler, Alice	Dom. Sci.	205½	32½	Dayton
Stafford, John Edward	Dairy	...	...	Trotwood
Staub, Otto	Dairy	...	...	New York Mills, N. Y.
Steward, Alice Ione	Dom. Sci.	205½	86½	Columbus
Stewart, Effie Edith	Dom.Sci.S.	94½	79½	Marcy
Stillwell, Margaret	Dom.Sci.S.	94½	40	Columbus
Stock, William Frank	Agr. S.	98	21	Seven Mile
Stormont, John Earl	Dairy	...	...	Xenia
Studer, Benjamin	Dairy	...	...	Trail
Sullivan, Fanny	Dom. Sci.	205½	105½	Rex
Tangemann, Clara Margaret	Dom. Sci.	205½	106½	New Bremen
Tarpning, Clifton Carmel	Dairy	...	...	Plain City
Thayer, Clyde Daniel	Agr.	211½	28½	Lima
Thomas, Frank Leslie	Agr. S.	98	101½	Chester Hill
Thompson, Bertha Louise	Dom.Sci.S.	94½	38	Columbus
Thompson, Glenn Otto	Agr. S.	98	37	Cedar Valley
Tillman, Opal	Dom. Sci.	205½	58½	Columbus
Tobias, Deane Abram	Agr. S.	98	91½	Bucyrus
Topliff, Harry Lewis	Agr.	211½	49	La Rue
Twitchell, Lee Downs	H. & F.	210½	143	Mansfield
Van Tassel, Charles	Dairy	...	...	Franklinton, N. Y.
Waid, Earnest David	Agr. S.	98	51	Wauseon
Walker, Arthur Fredrick	Agr. S.	98	45	Cleveland
Walker, Rolla E	Agr. S.	98	91	Attica
Washburn, Wayne	Agr. S.	98	79	Greenwich
Watt, Vivien	Dom. Sci.	205½	61½	Freeport
Weaver, Samuel James	Agr. S.	98	128½	Leipsic
Weber, Sophia Frances	Dom. Sci.	205½	163½	Columbus
Weist, Dwight Wilson	Agr.	211½	51½	Basil
Welling, Mary Alice	Dom.Sci.S.	94½	27½	Columbus
West, Ada Clara	Dom.Sci.S.	94½	33	Columbus
West, Frederick Long	Agr.	211½	41½	Bloomingburg
West, James Clyde	Agr. S.	98	84	St Paris
Wheeler, Thomas Leroy	Agr.	211½	114½	Chillicothe
Whipp, Wendell Edwin	Agr.	211½	47½	Dayton
White, Garrett Brown	Agr. S.	98	85½	Bucyrus

*Died October 28, 1901.

	Course	Course Hours	Credit Hours	Home Address
White, James Chalmer	Agr.	211½	51½	Lebanon
Wilder, Vine Alva	Dairy	...	...	Cork
Wolf, Mary Huida	Dom.Sci.S.	94½	25½	Campbellstown
Woodruff, Joseph Daniel	Dairy	...	...	Zanesville
Zehring, Edgar Levi	Agr. S.	...	114	Germantown

COLLEGE OF ARTS, PHILOSOPHY AND SCIENOE

GRADUATE STUDENTS — 47.

	Home Address
Abbott, Royal Albert, B. Ph.	Columbus
Andrews, Catherine Emily, B. A., Wellesley College	Columbus
Beman, Lamar Taney, A. B., Western Reserve	Cleveland
Bohn, Frank A., B. Ph., M. A.	Olmsted Falls
Bridwell, John Colburn, B. Sc., Baker University	Baldwin, Kansas
Converse, Edward Jasper, B. A., B. D., Yale University	Columbus
Cook, Melville T., A. M., De Pauw University	Greencastle, Indiana
Coursault, Jesse Harliainan, A. M., O. S. U.	Colnmbns
Davies, Arthur Ernest, B. D., Ph. D., Yale University	Columbus
Derby, Alice Greenwood, B. Ph.	Columbus
Detmers, Fredericka, M. Sc.	Columbus
Doney, Carl Gregg, B. Sc., LL. B., M. A., Ohio Wesleyan University	Delaware
Dubois, Wilbur L., B. Sc., Ohio Weslean University	Cincinnati
Dunlap, Louise, B. A., Oxford College	Columbus
Eisenlohr, Berthold August, B. Ph.	Cincinnati
Ewalt, Clara Converse, B. Ph.	Columbus
Hance, Harry Thomas, B. Sc.	Columbus
Harrington, Evaline, Ph. B., Wooster University	Columbus
Hine, James S., B. Sc.	Columbus
Kauffman, Henrietta Christine, B. Ph.	Columbus
Klein, David, Ph. B.	Columbus
Landacre, Francis Le Roy, A. B.	Columbus
Lentz, Florence, B. Ph.	Marysville
Linville, Clarence Philander, B. Sc.	Urbana
Lloyd, Erastus Guy, A. B., Otterbein University	Westerville
Long, Joseph, B. A., Ohio Wesleyan University	Columbus
Marsh, Mabel Elsie, A. B., Lake Erie College	Columbus
Mills, William C., B. Sc. (H. & F.)	Mt. Vernon
Mitzenberg, Allena May, B. Ph.	Columbus
Morrey, Charles Bradfield, A. B.	Columbus
McKinney, Frank C., A. B.	Columbus
Nauss, Ralph Welty, B. Sc.	Greenville
Norris, John S., B. Ph.	Columbus
Perry, Elma Brooks, B. Ph., B. Sc.	Troy
Pitts, Grace Lenore, B. Ph.	Columbus
Rasor, Samuel Eugene, B. Sc.	Clayton
Sanders, James G., Ph. B., Otterbein University	Westerville
Sayre, Charles Boyd, B. A.	Columbus

	Home Address
Schaedel Henry, A. B., Berea College	Columbus
Schaff, Mae B., B. Ph., 1900	Columbus
Scott Mary Bole, A. B	Columbus
Talbot, Mignon, A. B	Columbus
Travis, John F., B. A., 1900	Green Camp
Tyler, Fred Jared, B. Sc., 1900	Perry
Watson, Edward Thomson, B. Sc., 1897	Columbus
Williams, Anna Ernestine, B. Ph., 1899	Jackson
Williams, Mrs. Mary E., A. B., Ohio Wesleyan	Columbus

UNDERGRADUATES — 403.

	Course	Course Hours	Credit Hours	Home Address
Abernathy, Edward Robert, B. Sc.	Special	...	4	Columbus
Adair, Henry Sebastian	Special	...	30	McConnelsville
Adams, Elizabeth Jane	Arts	190½	152	Columbus
Addis, Harold Peebles	E. Ph.	189	28	Chester Hill
Applebaum, Meyer	Special	...	5	Columbus
Armbruster, Edward Bovey	Com.&Ad.	186	2	Columbus
Arnold, Mary Louise	Arts	187½	102½	Columbus
Ashbrook, Benjamin Franklin	Arts	186	1	Milo
Bacon, Daisy Deane	M. L. Ph.	186	39	Columbus
Baldwin, Mabel Dennison	Special	...	50½	Columbus
Ball, Ernestine Faye	Arts	190½	139½	Columbus
Bard, Harry Lester	L. Ph.	187½	33½	Cleveland
Beer, James Anderson	Special	...	212½	Ashland
Beery Harry Reber	Arts	190½	121½	Canal Winchester
Beggs, Harold Sargent	L. Ph.	186	25	Columbus
Bell, Mary Edith	Special	...	32½	Columbus
Bellows, George Wesley	Special	...	42	Columbus
Bellows, Gertrude Halm, B. Ph	.....	...	...	Columbus
Bennett, Sarah Catherine	E. Ph.	193½	63	Columbus
Berry, Mary	L. Ph.	187½	66½	Peebles
Biebl, Andrew J	Science	193½	133½	Gibbon, Minn.
Bigelow, Bernard Barton	L. Ph.	190½	148½	Findlay
Bigelow, Merrill Loving	Special	...	2	Columbus
Birnie, James Harry	Special	...	87	Marietta
Bittner, William Pitt, B. Ph	.....	...	...	Sandusky
Blakely, Nellie Dean	E. Ph.	189	24	Columbus
Bock, Theodore E	Special	...	79½	Hamilton
Boggess, Julia Louise	L. Ph.	186	7	Middleport
Boggess, Esther Alice Brown	L. Ph.	186	13	Middleport
Bolton, Elmer S	E. Ph.	189	42	McComb
Bonnet, Alvin Cook	Arts	190½	160½	Columbus
Booth, Carl Howard	L. Ph.	190½	151½	Columbus
Booth, Cora Vrooman	L. Ph.	190½	139½	Columbus
Bowers, Ida Olive	L. Ph.	186	41	Columbus
Bowles, John Porter, B. Ph	.....	...	...	Columbus
Bradford, Frances Elizabeth	E. Ph.	193½	142½	Columbus

	Course	Course Hours	Credit Hours	Home Address
Bridge, Effie Irene	Arts	190½	135½	Columbus
Bridge, Elesa Magdalene	E. Ph.	189	30	Franklin
Brinkerhoff, Josiah	E. Ph.	193½	44	Utica
Brown, Sarah Rebecca	Arts	186	52	Columbus
Bruehlman, Jacob James	Arts	186	...	Archbold
Brugger, Harvey	Science	193½	154	Clyde
Bryant, Mrs. Birdie	E. Ph.	189	45	Columbus
Bryant, David Clifton	E. Ph.	189	66	Columbus
Bryant, William Cheney, B. Ph	.....	...	...	Columbus
Bryce, Ethel	E. Ph.	189	28	Columbus
Budd, Harold A	E. Ph.	189	33	Perrysville
Bugbey, Harry Homer	Science	190½	72	Waverley, Ill.
Bulen, Elwood Joseph	Special	...	32½	Columbus
Burkey, James Edward	Com.&Ad.	186	45	Pleasantville
Burns, Sara L	L. Ph.	187½	80½	Columbus
Campbell, Clinton Arthur	Com.&Ad.	186	37+3	Piqua
Carey, John T	Special	...	43	Upper Sandusky
Carmack, Caroline Martha	Special	...	69½	Columbus
Carpenter, Frank Simpson	Special	...	23	Carpenter
Carpenter, Jessie Marie	E. Ph.	193½	191½	Columbus
Carson, Nellie Eliza, B. Ph	.....	...	...	Harrisburg
Chaffee, Ward Osborne	Com.&Ad.	186	17	Columbus
Chamberlain, Elizabeth Belle	E. Ph.	193½	45	Columbus
Chaney, James William, B. Ph	.....	...	...	Columbus
Charles, Owen Arthur	Com.&Ad.	186	...	New Straitsville
Clagett, Arthur E	M. L. Ph.	190½	177½	Dayton
Clapp, Katharine B, B. Ph	.....	...	...	Norwalk
Clark, David Burns	E. Ph.	189	42	Shandon
Clark, John T	Science	190½	74½	Louisville, Ky.
Cleveland, Charles Joel	Science	186	18	Galena
Clevenger, Charles Henry, B. Sc	.....	...	...	Fletcher
Clevenger, Joseph Franklin	Science	193½	175½	Fletcher
Cline, Forrest Williams	L. Ph.	186	9	Madison Mills
Coates, Elmer William	Arts	190½	115½	Pomeroy
Cockerill, Orville Porter, B. Ph	.....	...	...	Washington C. H.
Cockley, William Barney	E. Ph.	193½	98½	Lexington
Coe, Elton Perkins	E. Ph.	193½	100½	Garrettsville
Condit, Ira Judson	L. Ph.	186	39	Jersey
Cone, John Charles	E. Ph.	193½	144½	Hamilton
Connolley, Augusta, B. Ph	.....	...	...	Columbus
Cook, Harley Stephen	Com.&Ad.	186	19	Columbus
Corkery, Thomas Jefferson	Arts	190½	91½	Toledo
Covert, Florence Cecelia	Arts	186	48	Columbus
Cox, Lewis Clark	Science	190½	77½	Xenia
Coy, William Stacey	Arts	190½	148½	Columbus
Crew, Fleming Harold	Arts	186	39	McConnelsville
Crout, Ray Durand	E. Ph.	189	93½	Columbus
Crow, Elizabeth	Special	...	18	Rural Dale
Curry, Lucile	E. Ph.	189	36	Columbus
Dann, Florence Esther	L. Ph.	186	51	Columbus
Dann, Grace Adele	L. Ph.	186	51	Columbus
Dauben, Hypolite	Science	186	10	Columbus
Davidson, Ruth Emily	L. Ph.	190½	133½	Chicago, Ill.

	Course	Course Hours	Credit Hours	Home Address
Davis, Bessie Esther	M. L. Ph.	187½	76¾	Columbus
Davis, Franklin Levi	M. L. Ph.	187½	105	Columbus
Davis, Joseph D	Arts	186	49	Columbus
Dean, Ethel Sourbray, L. and J. Cer	.....	...	...	Columbus
Deardurff, Florence Ethel	L. Ph.	186	6	Columbus
Deardurff, Gertrude Hayden	Special	...	6	Columbus
Delay, Frank	L. Ph.	187½	96½	Jackson
Demorest, Ralph H	Science	190½	109½	Marysville
Derby, Walter Janney	L. Ph.	187½	106½	Columbus
Dickey, Francis Wilber	Arts	186	34	Clintonville
Dieterman, Hedwig Louise	M. L. Ph.	186	21	Columbus
Dillin, Ernest Stewart	Arts	187½	87½	Coshocton
Dinwiddie, Jennie	Special	...	31	Waynesville
Dolson, Benjamin Reinmund	E. Ph.	193½	141½	Lancaster
Donovan, Dennis Aloysius, B. Ph	.....	...	...	Columbus
Dowdell, Ida Isabelle	Special	...	52¾	Columbus
Dowler, Edwin Ernest	L. Ph.	187½	57½	Washington C. H.
Duckworth, George Edgar	Science	186	72	West Liberty
Dudley, Chester Knight	E. Ph.	189	...	Columbus
Dyer, Werter Clarkson	Arts	190½	148½	Plano
Early, Katharine Belle	L. Ph.	187½	94½	Columbus
Eastman, Katharine	L. Ph.	190½	139½	Columbus
Easton, Ernest Doane, B. Sc	.....	...	...	Springboro
Eaton, Esther	Arts	186	50	Columbus
Echols, Lenore Carrel	Arts	187½	110½	Columbus
Eckhardt, Carl Conrad, B. Ph	.....	...	...	Toledo
Eisele, Mary Pearl	L. Ph.	187½	102½	Columbus
Elder, Walter Newell	L. Ph.	190½	22	Selma
Enderlin, Louis Charles, A. B	Special	...	...	Allegheny, Pa.
Erb, Theresa	L. Ph.	187½	114½	Columbus
Farrar, Morton	Special	...	91½	London
Flory, Charles Henry	Science	193½	130	Arcanum
Fornof, Katherine Josephine	M. L. Ph.	186	39	Columbus
Foster, Asa Emmanuel	Arts	190½	90	New Salem
Foster, Ralph Akin	Com.&Ad.	184½	86½	Columbus
Frankenberg, Marie Louise	E. Ph.	189	26	Columbus
Frederick, Joseph Allen	E. Ph.	189	39	East Liverpool
Freeman, Ada Marian	E. Ph.	189	41	Chillicothe
Freeman, Bina Henrietta	M. L. Ph.	186	3	Chillicothe
Freeman, Phoebe Grace	Special	...	10	Chillicothe
Gardner, Earl Douglas	Com.&Ad.	184½	68	Columbus
Garman, Susan Editha	E. Ph.	193½	165½	Dayton
Glass, Melle Wilson	.....	...	...	West Manchester
Glass, Nelle Wilson	Arts	187½	115½	Columbus
Gordon, Sarah Bryarly, B. Ph	.....	...	...	St Marys
Gorham, Ira Garfield	E. Ph.	193½	120	Perrysville
Grant, Charles Clifford	E. Ph.	189	24	Columbus
Grant, Ruth Matilda	L. Ph.	187½	104½	Columbus
Gatigny, Florence Amanda	M. L. Ph.	186	48	Columbus
Greenslade, Rush Molland	Science	186	21	Wapakoneta
Greenwood, Helen Tuttle	L. Ph.	187½	85½	Columbus
Griswold, Robert Charles	Science	186	36	Elyria
Guilford, Frank Ross	E. Ph.	193½	87½	Wauseon

	Course	Course Hours	Credit Hours	Home Address
Guittard, Claude B.	M. L. Ph.	190½	149	New Bedford
Haeseler, Anna M.	L. Ph.	187½	98½	Springfield
Hagenbuch, George Edwin.	L. Ph.	190½	148½	Urbana
Hahn, George Philip.	Com.&Ad.	196½	142½	Napoleon
Hamilton, Isabelle M.	E. Ph.	189	51	Columbus
Hammond, Harvey George.	Science	190½	9	Millwood
Hard, Ansel Shallcross.	Special	...	92½	Chillicothe
Harrington, Harry Franklin.	E. Ph.	193½	66	Columbus
Harshman, John Burnett.	L. Ph.	187½	89	Alpha
Hartford, Martha Dudley, B. Ph.	.....	...	...	Atlanta, Ga
Hatcher, Wesley	Arts	186	3	West Mansfield
Hauss, Herbert Winfield.	E. Ph.	189	32	Wapakoneta
Hayden, Mrs. William Langdon.	Special	...	...	Columbus
Headley, Sanford Alphonso.	E. Ph.	193½	169½	Jacksonville
Henderson, Frank David.	Arts	186	21½	Watkins
Hengst, James McCleary.	Arts	187½	91½	Lancaster
Hensel, Donald Dean, B. Ph.	.....	...	...	Eaton
Herrick, Sara Ethel, B. Ph.	.....	...	...	Columbus
Hicks, Nellie, B. A.	.....	...	...	Centerburg
Hoffhine, John	Arts	187½	102½	Frankford
Hoffman, George Thomas.	Com.&Ad.	184½	92	Malta
Hollister, Mary Fuller.	L. Ph.	187½	85½	Galion
Holmes, William B. Gleason.	Science	190½	76½	Braddock, Pa
Holt, Mabel Stevens.	L. Ph.	186	53	Columbus
Hommon, Harry Britton.	M. L. Ph.	190½	128½	Marble Cliff
Hopkins, Bertha Marie, B. Ph.	.....	...	...	Columbus
Hopkins, Clara M, B. Ph.	.....	...	...	Columbus
Hopkins, Edith Estelle, B. Ph.	.....	...	...	Columbus
Hopwood, Harry LeVoy.	E. Ph.	189	46	Kenton
Houston, Mark Chapeze.	Science	186	36	Urbana
Hudson, Clara Putnam, B. Ph.	.....	...	...	Middleport
Hugger, Frederick William.	E. Ph.	189	50	Ironton
Hughes, Herbert Horton.	Com.&Ad.	186	33	Columbus
Huhn, William	E. Ph.	189	55	McArthur
Huling, Frank	Arts	190½	153	Columbus
Hungelmann, Arthur, B. Sc.	.....	...	...	Columbus
Hunter, Anna Eliza.	M. L. Ph.	190½	115½	Columbus
Hunter, Mary E.	Special	...	...	Columbus
Huntington, Charles Clifford, B. Ph.	.....	...	...	Yellow Springs
Huntington, Katharine Darlington.	Special	...	71	Columbus
Ingalls, Osmer Charles.	Com.&Ad.	186	46	Camp Chase
Jackson, Clifford Webster.	Arts	187½	85½	Columbus
Jackson, Gertrude See.	L. Ph.	187½	103½	Columbus
Jacoby, Mrs. Sarah C.	Arts	190½	169½+9	Columbus
Jennings, Elma, B. Ph.	.....	...	...	Eaton
Jennings, William Silver.	Science	190½	88½	Eaton
Johnson, Benjamin Monroe.	Arts	186	17	Columbus
Jones, Daniel C., B. Ph.	.....	...	...	Jackson
Keating, Miriam Grace.	M. L. Ph.	186	20	Columbus
Keiser, Forest LeGrand.	Science	193½	121	Bryan
Kern, Blanche May.	L. Ph.	187½	97½	Columbus
Kindle, Joseph Henry.	Science	186	39	Centerville
Kinugawa, Taro	Special	...	70	Nagoya, Japan

	Course	Course Hours	Credit Hours	Home Address
Kittle, James Monroe	Special	...	110½	Columbus
Knox, John Dorsey	M. L. Ph.	187½	79½	Homeworth
Kohr, Paul Homer	Arts	190½	144½	Columbus
Korst, Anna Katherine	M. L. Ph.	187½	90½	Chillicothe
Lane, Anna	Special	...	...	Columbus
Laylin, Clarence Dewey	Com.&Ad.	184½	109½	Norwalk
Leonard, Hannah Margaret	L. Ph.	190½	135	Columbus
Lewis, George Herbert	E. Ph.	189	53	Leo
Lewis, Nelle Byrd, Ph. B.	Special	....	26	Cedarville
Lisle, Thomas G.	Com.&Ad.	196½	148½	Columbus
Loechler, Elsa	L. Ph.	187½	103	Columbus
Loomis, Homer Leslie	Arts	187½	98½	Columbus
Lorbach, David, Jr.	L. Ph.	187½	97½	Waverly
Loren, Mary MacMillen	L. Ph.	189	126	Columbus
Love, Jacob Wainwright	E. Ph.	189	22	Warren
Mack, Egbert Hiram	E. Ph.	193½	159	Sandusky
Mackerley, Fay Sloan	E. Ph.	189	...	Hillsboro
Maetzel, Clara	Special	...	12	Columbus
Magly, George J.	Special	...	94½	Columbus
Maish, Carrie Lunetta	Arts	187½	108½	Columbus
Malone, James Bernard	Com.&Ad.	184½	94½	Souh Charleson
Mark, Mary Louise	Arts	190½	148½	Columbus
Mark, Robert Matthew	Arts	187½	100½	Milo
Martin, Franklin Ewing	M. L. Ph.	187½	106	Columbus
Martin, William Kooken	L. Ph.	190½	150½	Lancaster
Matthews, Max Moses, B. Ph.	.....	...	...	Vinton
Mead, Charles Searing	Science	190½	109½	Columbus
Meade, Caroline Annis, B. Ph.	.....	...	...	Columbus
Means, Hugh Jackson	Science	186	40	Columbus
Medbery, George	E. Ph.	189	28	Reynoldsburg
Medbery, Olive	E. Ph.	189	69	Reynoldsburg
Medbery, Roston	Arts	187½	109½	Columbus
Menefee, Susan C.	E. Ph.	189	14	Columbus
Merrick, Lawrence Hildreth	Arts	190½	131¾	Zanesville
Metcalf, Florence May	Arts	186	51	Columbus
Metcalf, Thomas Rees	Arts	186	...	Columbus
Metz, Walter Charles	Science	190½	87½	Newark
Miesse, Frank H.	M. L. Ph.	190½	184	Chillicothe
Miller, Cornelia Williams, B. Ph.	.....	...	...	Columbus
Miller, Edith Mary	E. Ph.	193½	91½	New Paris
Mills, Glendora, B. Ph.	.....	...	...	Marysville
Mills, Helen, B. Ph.	.....	...	...	Gallipolis
Mitchell, Lynn Boal	Arts	190½	169½	Piqua
Mitzenberg, Fannie Katheryn	L. Ph.	190½	145½	Columbus
Moist, Harvey Clinton	Com.&Ad.	186	19	Kinsey
Molloy, Mary Aloysia	L. Ph.	190½	138½	Sandusky
Morgan, Roy, B. Ph.	.....	...	...	Greenland
Morris, Samuel	Science	186	47	Bloomingburg
Morse, Max Withrow	Science	193½	166½	London
Mortimore, Gertrude Emily	Special	...	31	Ithaca, N. Y.
Morton, Max DeLos	M. L. Ph.	190½	145½	Ashtabula
Muirie, Frederick John, B. A.	.....	...	...	Youngstown
Myers, Herbert Merton	E. Ph.	189	42	West Alexandria

	Course	Course Hours	Credit Hours	Home Address
McAllister, Earl Saddler, B. Ph.	.....	...	...	Columbus
McAlpine, Maud A.	Special	...	96	Columbus
McCampbell, Eugene Franklin.	Science	190½	98	Marysville
McClelland, Cloys Peter.	Com.&Ad.	184½	104	Columbus
McClure, Roy Donaldson.	Science	190½	99½	Columbus
McCreary, Austin Jove.	E. Ph.	189	9	Brecksville
McDonald, Grace Irene.	L. Ph.	186	39	Celina
McDowell, James Keen.	L. Ph.	190½	151½	Columbus
McKinley, Mary Ann.	L. Ph.	187½	86½	Columbus
McKitterick, William George.	E. Ph.	189	53	Jackson
McLaughlin, Mary M.	L. Ph.	186	34	Caldwell
McLeod, Frank Garfield.	Arts	186	51	Central College
McMaster, Samuel Emerson.	Com.&Ad.	186	43	Demos
McPherson, Clarence Githens.	Science	190½	87	Xenia
McQuigg, Charles W.	Com.&Ad.	184½	45½+3	Pomeroy
McWhinney, Harry Ozias.	E. Ph.	193½	32½+2	Lewisburg
Nachtrieb, Clarence R.	E. Ph.	193½	125½	Wauseon
Nichols, Ada May, B. Ph.	.....	...	...	Chillicothe
Nichols, Marion Louise.	M. L. Ph.	186	51	Chillicothe
Norton, Caroline Clemence.	L. Ph.	187½	85½	Columbus
Noxon, Frank Montressor.	E. Ph.	189	52	Lorain
Nye, William Augustus.	L. Ph.	186	34	Zanesville
Oblinger, Gates Charles, Jr.	E. Ph.	193½	75+3	Dayton
O'Brien, Charles Francis.	E. Ph.	193½	150½	Urbana
O'Connor, Mary Winifred.	L. Ph.	186	10	Columbus
Ogan, Servitus	E. Ph.	189	9	Columbus Grove
Ogihara, Takujo	M. L. Ph.	187½	49½	Tokio, Japan
Olmstead, Roscoe Charles.	Science	190½	102	Warren
Overturf, Alva Kendall.	Com.&Ad.	184½	94½	Columbus
Owen, Lloyd	E. Ph.	189	42	Magnetic Springs
Paine, Seth Webb.	Com.&Ad.	184½	64½	Columbus
Pansing, Wilbur	Com.&Ad.	186	33	Miamisburg
Parker, Harry R.	E. Ph.	193½	34½	Pataskala
Parrett, Frank Coffman.	Arts	187½	97½	Washhington C H
Partridge, Bert Mitchell.	E. Ph.	193½	56¾	Flint
Paterson, Robert Gildersleeve.	L. Ph.	186	34	Columbus
Patterson, Thomas McNutt, Jr.	Special	...	1	Portsmouth
Pattison, John Williams.	Arts	187½	4	Milford
Pegg, Katharine Amos.	L. Ph.	186	39	Maple Heights
Pegg, Lillian	E. Ph.	189	48	Columbus
Pence, Raymond Woodbury.	Arts	186	51	Columbus
Peterson, Niels Mortensen.	L. Ph.	186	43	Columbus
Phillips, Lydia	M. L. Ph.	187½	66½	Columbus
Pletcher, Etha Adelle.	Arts	186	13	McConnelsville
Plum, Harley Martin, B. A.	.....	...	...	Ashville
Pocock, Lucy Hunt, B. Ph.	.....	...	...	Columbus
Porter, Minnie Ella.	M. L. Ph.	187½	122¾	New Philadelphia
Postle, Carl Haldy.	Com.&Ad.	196½	131	Columbus
Postle, Clara Williamson.	E. Ph.	189	42	Columbus
Potter, Katharine May.	Arts	186	30	Columbus
Potts, Beulah Josephine.	Arts	190½	148½	Columbus
Powell, Cornelia, B. A.	.....	...	...	Columbus
Powell, Raymond Thompson.	E. Ph.	189	42	Columbus

	Course	Course Hours	Credit Hours	Home Address
Pratt, Edna Stuart	Arts	187½	91½	Columbus
Pratt, Jean Paul	M. L. Ph.	186	54	Huntington
Prince, Frank Joseph, B. Sc	.....	...	...	Millerstown
Randall, Rita	M. L. Ph.	187½	94½	Columbus
Rankin, Stanley F	E. Ph.	189	56	Columbus
Redrow, Clara M	M. L. Ph.	189	151½	Williamsburg
Richardson, Robert Edwin	Arts	187½	136½	Toledo
Ridenour, Walter Ashton, B. Ph	.....	...	...	Jackson
Ridgley, Clarence Fleming	E. Ph.	189	18	Chesterhill
Roberts, Helen Estelle	L. Ph.	186	36	Columbus
Robinson, Ellis Astor	E. Ph.	189	42	Ostrander
Roebuck, Edith Amanda	Special	...	28	Columbus
Roekel, Frederick Augustus	E. Ph.	193½	147	Zanesville
Romick, Mabel Jane	M. L. Ph.	186	39	Hilliard
Rothrock, Maynard Wilbur	Arts	190½	15	Akron
Rowley, Claude Arthur	E. Ph.	189	26	Loraine
Ruggles, Louise Platt	E. Ph.	189	...	Columbus
Rupright, Otto Conrad	E. Ph.	189	41	Van Wert
Rusk, Raymond Edgar	E. Ph.	189	56	Pataskala
Sackett, Florence Margaret	M. L. Ph.	186	28	Columbus
Salm, Edna Esther, B. Ph	.....	...	...	Columbus
Salt, Nellie Elizabeth	Arts	186	52	Columbus
Scarlett, William Joseph	Arts	187½	109½	Columbus
Schaff, Hazel Inskepp	Arts	186	30	Columbus
Schantz, Albert J., B. Sc	.....	...	...	Dayton
Schilling, Dorothy Christine	Special	...	11	Columbus
Schoedinger, Ferdinand P., B. A	.....	...	...	Columbus
Scofield, Stanley Thompson	L. Ph.	186	33	Ironton
Sessions, Elizabeth	Special	...	60	Columbus
Seymour, Nellie May	Arts	187½	67	Columbus
Shackelford, Elmer Amos	E. Ph.	189	31	Tipton, Mo
Shannon, Harris Cooper	E. Ph.	193½	160½	Wakeman
Shawan, Harold Koch	Arts	186	52	Columbus
Sheets, Nellie Florence	E. Ph.	193½	97½	Columbus
Shoemaker, Carl David	Com.&Ad.	184½	94½	Napoleon
Shotwell, Abel Vail	L. Ph.	186	50	Marengo
Shride, Mabel Margaret	Arts	186	48	Columbus
Simpson, Warner Pike	E. Ph.	193½	120½	Worthington
Skimming, Wilbert Bobb	Science	193½	118½	Wilmington
Smead, Annie Elizabeth	L. Ph.	187½	96	Columbus
Somermeier, Edward Everett	Special	...	28	Westwood
Souder, Charles Granville	Science	193½	124⅚	Lafayette, Ind
Southard, Harry Green	E. Ph.	193½	67½	Marysville
Sproat, Martha Evans	L. Ph.	190½	163½	Columbus
Stafford, Anna Stella	E. Ph.	189	5	Wellston
Staley, Homer F	Arts	187½	129	Columbus
Stephens, Jessie Frances	M. L. Ph.	186	46	Columbus
Steward, James Clarence	E. Ph.	193½	141	Marcy
Stiver, Joseph Alfred	Arts	187½	50½	Columbus
Strayer, Jessie Elisha	E. Ph.	189	15	Columbus
Strickler, Lois Lenore	Arts	186	51	Columbus
Stuart, Dee Daniel	E. Ph.	189	6	Lebanon
Summer Samuel Nathan	E. Ph.	189	54	Shelby

	Course	Course Hours	Credit Hours	Home Address
Surfact, Frank Macy	Science	190½	101½	Eaton
Swaney, Sara C, B. Ph	.....	...	...	East Liverpool
Sykes, Harry Raymond	Science	190½	58	Plymouth
Tallmadge, Harold Hedges	Com.&Ad.	186	61⅝	Columbus
Tatje, Oral D	E. Ph.	193½	150½	Columbus
Taylor, Bessie Battelle, B. Ph	.....	...	...	Columbus
Taylor, Mary Hill	L. Ph.	190½	145½	Columbus
Taylor, William Harry, B. Ph	.....	...	...	Columbus
Thomas, Laura Parsons	L. Ph.	186	51	Columbus
Thomas Phillips	Science	190½	109½	Columbus
Thompson, Bessie Agnes	Arts	187½	93½	Columbus
Thompson, Mrs. Estelle Clark	Special	...	20	Columbus
Thompson, Loula Belle	Special	...	4	Georgetown
Thompson, Roy Washington	L. Ph.	190½	139½	Gallipolis
Tilton, Josephus Howard	Special	...	...	Jelloway
Tipton, William Howard	L. Ph.	186	38	Caldwell
Tressel, Laura Amelia	E. Ph.	193½	114½	Columbus
Turner, Bertha Louis	M. L. Ph.	190½	165	Columbus
Turner, Emma Etta	E. Ph.	189	42	Columbus
Van Fleet, Willis Hayden	E. Ph.	189	42	Fleetville, Va.
Vogel, Katharine Augusta	L. Ph.	186	27	Columbus
Wacker, Alma Henrietta	Science	190½	106½	Columbus
Wagner, Bessie	Arts	186	39	Columbus
Walsh, Frances Lyon	Arts	189	144	Columbus
Ward, Annette Persis	Special	...	105½	Columbus
Warner, Cecil Elisha	E. Ph.	193½	100½	St Paul
Warner, John Howell	Arts	190½	145½	West Shelby, N Y
Weaver, Mima Jacobs	E. Ph.	193½	174½	Dayton
Weber, Hilda Laurier	Special	...	34	Columbus
Weber, Mary Isabelle	M. L. Ph.	187½	93	North Broadway
Welling, David Cramer	L. Ph.	186	39	Worthington
Westlake, Herbert Eugene	E. Ph.	189	4	Dayton
Whetsel, James Anderson Garfield	Arts	190½	149	Columbus
Wilbur, Mrs. Hollis Adelbert	Special	...	22	Columbus
Wilkinson, John Anderson	Science	193½	160½	Piqua
Williams, John Clark	Special	...	87	Walnut Grove
Williams, Mrs. Nina Starr	Special	...	2	Columbus
Willis, Roche Carl	L. Ph.	187½	87½	Columbus
Wilson, Alice C	Special	...	37	Alton
Wing, Lucius Arthur	Science	193½	134½	Columbus
Woodbury, Ethyl	L. Ph.	186	47	Columbus
Woods, William Burroughs, B. Ph	.....	...	...	Garrettsville
Wortman, Frederick Phipps	L. Ph.	187½	65½	Reid
Wright, Allison Bronson	Arts	187½	20½	Chesterhill
Yoshisaka, Heikichi	Special	...	34	Kobe, Japan
Young, Carl Houseman	Arts	187½	93	Columbus
Young, Ethel DeNune	Arts	190½	155	Columbus
Zehring, Robert Henry	Com.&Ad.	186	34	Miamisburg

COLLEGE OF ENGINEERING

GRADUATE STUDENTS — 1

De Wolf, Roger Dennison, M. E. ..... Marietta, Ga.

UNDERGRADUATES — 584.

	Course	Course Hours	Credit Hours	Home Address
Aid, Albert Charles	Ind. Arts (S.)		60	Chillicothe
Aleshire, Charles Elmer	Eng.		46½	Jackson
Alford, Arthur Milton	M. E.		181	Windham
Alsdorf, Robert Clyde	M. E.		108	Utica
Ames, E. Holiday	C. E.		153	Columbus
Anderson, Cleland George	Eng.		77	Ostrander
Anderson, Walter Stewart	C. E.		58½	Mt Vernon
Armstrong, Hugh Cook	E. E.		113½	Clintonville
Armstrong, Thomas Hudson, Jr.	Eng.		55½	Woodsfield
Armstrong, Warren Alexander	Cer. (S.)		6	Columbus
Ashburn, John Chowning	C. E.		45½	Batavia
Asher, Clyde Blaine	Eng.		55½	London
Asire, David Judd	Eng.		33½	Fostoria
Atkinson, Joseph Barnard	Chem.		107½	Pataskala
Bailey, Ervin George	M. E.		196	Damascus
Bailey, Purdy Sanford	C. E.		47	Warren
Baird, Charles Kumler	Eng.		45½	Hamilton
Baker, Hugh Jacob	Eng.		55½	Dayton
Balz, Ernest Charles	C. E.		177	Columbus
Balz, Louis Christian Frederick	C. E.		142	Columbus
Barienbrock, Charles Henry	Eng.		66½	New Bremen
Barringer, Lawrence Eugene, E. M. in Cer	.....		...	Washington, D. C.
Barry, William John	C. E.		176	New Straitsville
Battenfield, John Milton	E. E.		127½	Delaware
Beach, Howard Lindsley	E. E.		106½	Glen Ridge, N. Y.
Beaver, Edgar Everett	Eng.		...	Worthington
Bebout, Guy Burnette	Eng.		43½	Wheeling, W. Va.
Beebe, Hugh McDowell	Eng.		37½	Sidney
Beer, Thomas	Eng.		49½	Ashland
Bell, Wakeman Clark	Eng.		55½	Dorchester, Mass.
Benedict, Eric Wilson	E. E.		98½	Waterbury, Conn.
Beutler, Frank Earnest	Eng.		55	Greenville
Birdseye, Claude Hale, B. A.	C. E.		110½	Oberlin
Bishop, Herbert J.	Eng.		20½	Ashhley
Bomesberger, Walter Nelson	E. M.		163½	Columbiana
Bone, Evan Paul	Eng.		51½	Lebanon
Boothman, Dale Maxwell	M. E.		150½	Bryan
Bostater, Herbert Lee	E. E.		129½	Ney

	Course	Course Hours	Credit Hours	Home Address
Bostwick, Oliver Newton, C. E.	.....	.....	...	Mt Sterling
Bowen, John Rochester		Eng.	46½	Logan
Boxwell, Leslie Vaughan		E. E.	49½	Franklin
Boyd, Edgar LeRoy		Eng.	44½	Urbana
Brandon, Bruce Arnstrong		E. E.	72½	Prairie Depot
Brannan, Thomas Hayes		C. E.	151½	Marysville
Brashear, Edward Rosemond		C. E.	161½	Columbus
Bridgeman, Benjamin Lonnis		C. E.	101½	Syracuse
Brillhart, Howard Edwin		Eng.	37½	Newark
Briney, Clifford H		Eng.	9½	Woodstock
Britton, Guy		C. E.	106½	Simons
Britton, Lloyd C		C. E.	209	Williamsburg
Brooke, Merle Carleton		Eng.	40½	Columbus
Brooks, Herbert Barton		E. E.	192	Piqua
Brown, Clarence Gittings		M. E.	54½	Columbus
Brown, George Herbert		Eng.	...	Doylestown
Brown, Lucian Carstencen		M. E.	34½	Columbus
Bryan, Merrill Logan		Eng.	26½	Ironton
Bull, Philip Sidney		E. M.	55½	Hanging Rock
Bumann, Cecil Spencer		Eng.	37½	Bunker Hill, Ill.
Bumann, Harry Otto		Eng.	38½	Litchfield, Ill.
Burch, Orrin		E. E.	139½	Columbus
Burgess, Arthur Luis		E. E.	55½	Columbus
Burnham, Locke Henry		Eng.	55½	Columbus
Burrell, Glenn Smith		C. E.	107½	New Lexington
Burwell, Ralph		Chem.	68½	Tippecanoe City
Bushey, Charles Lester		C. E.	56	Shelby
Cameron, Gaylor Malcom		E. E.	112½	Jeromeville
Cameron, James L		Arch.	135½	Melvern
Campbell, John Grant		E. E.	83	Dayton
Campbell, Willis Elmer		Chem.	109	Fostoria
Cartzdafner, Roy Edwin		M. E.	166½	London
Case, Willis Whittier		Cer. (S.)	...	Washington, D C
Casebeer, Elmer Robert		C. E.	75½	Canal Dover
Cavin, Frank Thomas, M. E. in E. E.	.....	.....	...	Spencer
Chaffin, Wendel Wilson		C. E.	116	Dayton
Chamberlain, John Ross		C. E.	197½	Tiffin
Chambers, Sherman Daniel		Eng.	43½	West View
Chambers, William Royal		M. E.	97½	Damascus
Chandler, William H		C. E.	36½	Bellefontaine
Chapman, Harvey Graves		Eng.	38½	Gypsum
Chubb, Charles St. John, Jr		Arch.	110½	Columbus
Chubb, Joseph Horace		C. E.	141½	Columbus
Chubb, Lewis Warrington		Eng.	58½	Columbus
Clapp, Charles Elmer		Eng.	4	Middletown
Clark, Orelia Bradford		M. E.	101½	Columbus
Clark, Thomas Walter		Cer.	108½	Shawnee
Clark, James Ulrick, E. E.	.....	.....	...	Lancaster
Cockins, Frederick Dietz		Eng.	55½	Columbus
Coleman, Grafton		Eng.	18½	Westfield
Colgan, John Ambrose		E. M. (S.)	56½	Columbus
Collins, Daniel		E. M. (S.)	...	Coalcenter
Conley, Clyde Greyson, C. E.	.....	.....	...	Newark

	Course	Course Hours	Credit Hours	Home Address
Connors, John Leo		Eng.	105½	Columbus
Conrad, Herman William		Eng.	52	Troy
Conrad, Verne Louis, C. E.		.....	...	Columbus
Converse, George Leroy, Jr.		C. E.	48½	Columbus
Cook, Spencer Nye		E. M.	179½	Chillicothe
Cooper, Albert Bray		Ind. Arts (S.)	18	Urichhsville
Cooper, Ralph McClelland		Ind. Arts (S.)	94	Struthers
Cooper, Sheldon Dill		Eng.	55	Youngstown
Coover, Winfred Forrest, B. A.		Chem.	89	Dayton
Cory, Mark Dee		C. E.	88½	De Graff
Cosgrave, Frank Lofland		Eng.	35½	Zanesville
Cosley, John Weddell		M. E.	100½	Troy
Cott, Parker Sanders		Eng.	7	Columbus
Coulter, Leonard Burnside, B. Sc.		Cer.	127½	Oxford
Cox, George William		Eng.	28½	Trinway
Cox, Paul Ernest		Eng.	52	Crawf'dsville, Ind.
Crable, George, E. M.		.....	...	Columbus
Craig, Clarence Eli		Eng.	18½	Washington C H
Craig, Paul Selwin		C. E.	108½	Shreve
Crane Kinsel Carson		M. E.	68½	Columbus
Crocker, Theodore Doane		E. E.	114½	Cleveland
Croner, Elmer William		Eng.	56½	Troy
Crooks, Thomas Elliott		E. E.	157½	Van Wert
Croswell, Harry Vergil		Eng.	7½	Columbus
Cunningham, Robert Henry, Jr.		Eng.	55½	Columbus
Curran, Michael Francis		C. E.	51½	Corning
Curtis, Cyrus Martindale		Eng.	42½	Kirtland
Curtis, Roy Elmer		E. E.	93	Niles
Dalton, John Simpson		E. E.	36½	Shreve
Daney, Norman Lewis		Eng.	35½	Elyria
Dann, Walter M., M. E. in E. E.		.....	...	Columbus
Darby, Frank Pierce		Ind. Arts (S.)	41	Columbus
Darrah, John Francy		E. E.	72½	Toronto
Davidson, Thomas Jefferson		Eng.	48	Springfield
Deckman, Edward John		Special	7	Dayton
Demorest, Dana James		Eng.	55½	Marysville
Dickinson, Ralph Vivian		Eng.	13	Columbus
Dille, Clarence		E. M. (S.)	...	Newark
Donavin, Charles Stuart		Special	7	Columbus
Dorsey, Walter Alfred		M. E.	107½	Newark
Doty, Oliver Perry, Jr.		E. M.	133½	Gervais
Dunn, Forester Eugene		Ind. Arts (S.)	55	Columbus
Dunsford, Jan Rubidge		Eng.	4½	Columbus
Dupuy, Benjamin Francis		C. E.	162½	Ironton
Dyche, Howard Edward		Eng.	46½	Spring Valley
Eagle, William Howard		C. E.	50½	Lakefork
Ecker, Harrison Grant		E. M.	121½	Columbus
Edgerly, Raymond John		C. E.	111½	Pataskala
Emswiler, John Edwin		M. E.	166½	Morgan Center
Errett, Isaac George		Eng.	54½	Mt Vernon
Escobar, Raphael		Eng.	129½	Puerto Principe, Cuba
Evans, Samuel Thomas		Eng.	37	Dayton

	Course	Course Hours	Credit Hours	Home Address
Evans, William E.		E. M. (S.)	91	Lisbon
Eysenbach, Louis, Jr.		C. E.	163½	Delphos
Falkenbach, Schatz		Eng.	41½	Columbus
Fast, John Edwin		C. E.	46	Columbus
Fay, Byron Ayres		M. E.	102½	Columbus
Fay, Sherman		M. E.	152½	Wyoming
Feeman, John Henry		E. M.	88	Columbus
Feicht, Edward Rall		M. E.	116½	Dayton
Fenstermaker, Charles Howard		Eng.	55½	Basil
Ferguson, James Warren		Eng.	54	Willoughby
Finckel, Benjamin		Ind. Arts (S.)	2	Washington, D. C.
Fisher, Charles Samuel		Eng.	33	Flushing
Fitzer, Joseph Benton		E. M. (S.)	23	Wellston
Fleming, Joseph Hamilton		C. E.	208	Olentangy
Flickinger, Edwin E.		M. E.	61½	Cleveland
Flowers, Dean Wilcox		E. M.	110½	Columbus
Foote, Myron Tinchan		Eng.	51½	Medina
Foster, Vause		E. M.	154½	Higby
Frame, Rollo St. Clair, C. E.		.....	...	Washington
Frankenberg, George T., M. E.		.....	...	Columbus
Franzheim, Charles Merts		Cer. (S.)	35	Wheeling, W. Va.
Freer, Will Davis		E. M.	78	Cortland
Fuller, Charles William		E. M.	89	West Madison
Fulton, James Stewart		M. E.	124½	Steubenville
Funk, Leo William		Chem.	110½	Chester Hill
Gage, Samuel Wallace		Eng.	53½	Eagle Bridge, N Y
Galbreath, Albert Webster		C. E.	70	Columbus
Gallen, Joseph Michael		Eng.	49	Columbus
Gardner, Charles Croxell		Eng.	42½	East Liverpool
Garretson, Joseph Alfred		Cer. (S.)	40	Columbus
Gault, Paul Max		Eng.	36½	North Jackson
Gehres, Hewitt Adam		Eng.	38½	Waverly
Gerard, Harley J. A.		E. E.	68½	Greenville
Geren, Arthur G.		Cer. (S.)	60½	Columbus
Geren, James Richard		Cer. (S.)	...	Columbus
Giessen, Kurt		E. M.	82½	Canton
Goddard, Arthur Samuel		Ind. Arts (S.)	28	Franklin Furnace
Goddard, Harry Eldon		Eng.	38	Wellston
Gorrell, Edmund Morgan		E. E.	95½	Bellaire
Gould, William Stewart		M. E.	158½	Wyoming
Graham, Frederic William		Eng.	26½	Columbus
Gregory, Carl Louis		Chem.	41½	Geneva
Greter, Frederick W.		Eng.	37	Middletown
Griffin, Carl Hawthorne		Cer. (S.)	45	Columbus
Guiss, Charles Alfred		Eng.	54½	New Washington
Gwynn, Josiah Walker		E. E.	91½	Wheeling, W. Va.
Hackney, William Wesley, Jr.		Eng.	93½	Dayton
Hadsell, Harry Irvin		Eng.	13½	Hartwell
Hailman, William Alexander		Special	29	Dayton
Hall, Charles Ritchie		Eng.	55½	Columbus
Hall, James Henry		Eng.	2½	Columbus
Halverstadt, Herbert		Cer.	74½	Columbiana
Hamilton, Albert		M. E.	17	Boston, Mass.

	Course	Course Hours	Credit Hours	Home Address
Hamilton, Ross Elroy	C. E.		151½	Keene
Hammond, Clyde Ellsworth	Eng.		55½	Wheeling, W. Va.
Hammond, Frank	Eng.		...	Chester Hill
Hammond, John Miller, C. E.	...		...	Columbus
Hanna, Walter	Eng.		16½	Westerville
Hapgood, Eugene Palmer, B. Sc. in Chem.	...		...	Sabina
Hardy, Paul	E. M.		155½	Columbus
Harrington, Alfred Lewis	E. E.		128½	Xenia
Harris, Ambos Mahon	E. M.		57½	Columbus
Harris, Ralph Neander	E. E.		53½	Columbus
Harris, Walker Blasdell	Cer. (S.)		30	Ogden, Utah
Harrop, Carl, E. M	...		...	Columbus
Harsh, John Marion	Chem.		62½	Cleveland
Harvey, Clarke Kenerly	C. E.		107	Brownsville
Haskett, Frank Hager	Ind. Arts (S.)		52½	Marion
Haver, William Underwood	Eng.		2½	Willoughhby
Hawthorne, Carl Henderson	C. E.		101½	Cambridge
Hayden, Florence Kenyon	Arch.		94½	Columbus
Haynes, Frank Leslie	Eng.		28½	Frankfort
Hays, Charles Bradford	M. E.		110½	Hilliards
Haywood, John Ray	Eng.		28½	Madison
Heasley, George Sidney	Ind. Arts (S.)		34	Poland
Heaton, Merton Timer	C. E.		81½	Vigo
Hegelheimer, Edward Andrew	E. M.		48½	Columbus
Helvey, George Stanley	M. E.		162½	Hamilton
Hepner, Charles Rudolph	Eng.		55½	Columbus
Hildred, George Eugene	Eng.		2	Napoleon
Hill, Cortland Latimer, Jr.	C. E.		161½	Berlin Heights
Hinman, Harold Faxon	Special		43	Elyria
Hirst, Harry	E. M.		190	Midvale
Hitch, James Frank, C. E.	...		...	Batavia
Hite, Florence Elizabeth	Arch.		112½	Columbus
Hobbs, Caleb	Eng.		51½	Barnesville
Hock, John Aloysius	Eng.		39	Columbus
Hoffman, Kurt	E. M. (S.)		26½	Leipsic, Germany
Holbrook, George Frederic, E. M.	...		...	Bucyrus
Holloway, Thurman Welferd	M. E.		130½	Zanesville
Holmes, Carl Gilbert	Eng.		54½	Hillsboro
Hood, Willard J	M. E.		105½	Cambridge
Hoover, Frank Garfield	Eng.		48½	New Berlin
Hope, Harry Leroy	Eng.		43½	Paint
Hopkins, Lloyd Clark	M. E.		111½	Nelson
Howard, Verne Dwight	Eng.		2	Columbus
Howard, Oscar David	Arch.		194	Circleville
Howe, Roy Edwin	E. M.		117	Lodi
Howland, Charles Morton	Eng.		52½	Ripley
Howson, Charles Thatcher	M. E.		115½	Chillicothe
Huddleson, Frank, E. M	...		...	Columbus
Hughes, Earle Ocala	Eng.		46½	Hamilton
Hulbert, William Rowsell	M. E.		131½	New York, N. Y.
Hull, Walter Austin, E. M. in Cer.	...		...	Orangeville
Hultguist, Victor Jonas	Ind. Arts (S.)		38	Jamestown, N. Y.

	Course	Credit Hours	Home Address
Humphrey, Harold Phelps	Cer.	117½	Elkland, Pa.
Hyman, Harry Abe	C. E.	105½	Mt Vernon
Iams, Jesse Dorsey	Eng.	55½	Sheridanville, Pa.
Imler, Fern Arthur	Eng.	11½	Leistville
Jackson, Paul Gray	Ind. Arts (S.)	52	Columbus
Jacobi, Jacob Albert	Eng.	51½	Greenville
James, Frank Richard	E. M.	109	Columbus
Jaynes, Gaylord Clark	Eng.	11	Columbus
Jesson, Charles Rosling	Ind. Arts (S.)	6	Mansfield
Johnson, James Massie	Ind. Arts (S.)	24	Blacksburg, Va.
Johnson, Walter A., M. E.	.....	...	Columbus
Johnson, Wilferd Gee	Ind. Arts (S.)	95	Lisbon
Johnston, Edward G.	M. E.	41	Bangor, Mich
Jones, Granville Peynard	C. E.	89	Columbus
Judson, Walter Raymond	M. E.	166½	Dayton
Kalb, Warren Cornelius	E. E.	110	Bluffton
Keating, Harvey Thomas, B. Sc. in Chem.	.....	...	Columbus
Keiser, Bertrand	Eng.	2½	Miamisburg
Kellogg, Frank Cummings	C. E.	87½	Kingsville
Kempton, Willard Hoyt	E. E.	111½	Trimble
Kennedy, William McCreery	Cer. (S.)	29	New Brighton, Pa.
Kern, William Frederick, B. Sc. in Chem.	.....	...	Bellaire
Kern, Walter Brown	Eng.	22½	Dayton
Kettering, Charles Franklin	E. E.	111	Loudonville
Kinders, William Rusk	Special	46	Casstown
King, Roy Stevenson, M. E.	.....	...	Xenia
Kittle, Rutherford Martin	E. M. (S.)	...	Phillipi, W. Va.
Klie, Walter	M. E.	157	Columbus
Knoderer, Homer Guy	E. E.	164	Columbus
Knopf, Carl Lafayette	Eng.	54½	Columbus
Kohler, Gustave Adolph	C. E.	63½	Chillicothe
Krauss, Edward Campbell	Cer. Spl.	80½	Ottawa
Krick, George Milton	Cer. (S.)	62	Decatur, Ind.
Krumm, Thomas Zettler, C. E.	.....	...	Columbus
Kuen, Carl Max	Eng.	55½	Baltimore, Md.
Kuenzel, Oscar	Eng.	64½	New Bremen
Kunkle, Fred Raymond	E. E.	197	Bryan
Lake, Lewis Joseph	Eng.	48½	Richwood
Lampert, John Martin	M. E.	114	Xenia
Landahl, Eugene Everett	Eng.	74½	Plain City
Langenberg, Edgar Palmer	Eng.	33½	Beverly
Laurencena, Miguel John	Eng.	34	Parana, Argentine Republic
Lawson, James William	Eng.	...	Centerville
Laylin, David	M. E.	105½	Norwalk
Layman, Frank Edmund	Eng.	45	Youngstown
Lee, Louis Robert	Eng.	36½	Kirtland
Leibold, Carl Peter	E. E.	104½	Columbus
Lewis, Charles G.	Ind. Arts (S.)	61	Akron
Lied, Ernst Mitchell	E. E.	111	Columbus

	Course	Course Hours	Credit Hours	Home Address
Lindenberg, Leo		Eng.	11	Arlington Heights
Linxweiler, Otto		M. E.	152½	Dayton
Little, John Howard		Eng.	50½	Delaware
Loewensohn, David		C. E.	143½	Urbana
Long, George Garfield		E. M.	154½	Tippecanoe City
Love, Charles Alexander		Eng.	24½	Warren
Lovell, Rollin Bernard		Eng.	...	Glouster
Lux, Walter Garfield		M. E.	78½	Topeka, Kansas
Lynn, Harry		Ind. Arts (S.)	113½	Columbus
Maddux, Fred Wilbur		Eng.	...	Xenia
Malone, George Eggleston		Eng.	48	Dayton
Marker, James Reed		C. E.	108½	Versailles
Marquardt, William Benjamin		E. M.	119½	Dayton
Marshall, Charles Howard		M. E.	166½	Fair Haven
Martin, Ira Oland		E. E.	71½	Columbus
Martin, Ray Morton		M. E.	105½	Richwood
Mattoon, Winfred L.		C. E.	101½	Plain City
Maxwell, Vernon Claypoole		E. E.	75	Toledo
Maxwell, William Chase		M. E.	106	Syracuse, N. Y.
Meek, Paul Deady		C. E.	65	Columbus
Meiklejohn, Robert		M. E.	121½	Columbus
Melick, Cyrus Alan		C. E.	161½	Columbus
Mellinger, Aubrey H.		Eng.	55½	Arcanum
Mendonca, José Gabriel		Special	7½	S. Paulo, Brazil
Mercer, Robert Wood		E. M.	154½	Chester Hill
Merrell, William Stanley		E. E.	102½	Hartwell
Merrill, Ernest Martin, C. E.		.....	...	Toledo
Merrill, Ferrand Seymour		Eng.	51½	Cincinnati
Merrill, Ralph Ozias		Eng.	37½	Ai
Metz, Ora Franklin		Eng.	65½	Norwood
Miller, Albert Arthur, C. E.		.....	...	Zanesville
Miller, Charles Addison		Eng.	33½	Mt Vernon
Miller, Eugene Alpheus		Eng.	49½	Akron
Miller, Homer Blaine		Special	39	Boston, Mass.
Mills, Nelson Anderson		Eng.	2	Columbus
Minns, Raymond Howard		Ind. Arts (S.)	53	Lodi
Minor, Wells Hammond		E. M.	154½	Akron
Minton, Roy Himes		Cer.	107½	Covington
Mohler, Lee Hill		Eng.	58½	Orrville
Monett, Charles Henry		Eng.	51½	Columbus
Mooney, George Lewis		E. E.	168½	Woodsfield
Moore, John		Ind. Arts (S.)	52	Columbus
Moore, James Orville		Eng.	37	Washington C H
Morehouse, Wallace Wilber		C. E.	74½	Dayton
Moreton, David Penn		Eng.	55½	Moscow
Morey, Paul Campbell		Eng.	54½	Hamilton
Morlan, Wilbert		M. E.	188	Rogers
Morrill, DeWitt Clinton		Special	19½	Marion
Morris, Willard Bernard		M. E.	196	Columbus
Morris, William Blaine, M. E.		.....	...	Massillon
Morten, Charles Roy		E. M. (S.)	5	Columbus
Mossman, Edwin Matthew		Eng.	...	Columbus
Murphy, Joseph Lincoln		C. E.	161½	McArthur

	Course	Course Hours	Credit Hours	Home Address
Myers, Fred		Eng.	56½	Louisville
McCleary, Fred Elmer		Eng.	40½	Connorville
McComb, Hoyts Sherman		E. M.	89½	Columbus
McDaneld, Dester Edward		E. M. (S.)	15	Columbus
McFarland, Horace M., E. M		.....	...	Columbus
McFarlane, William Arthur		Cer. (S.)	37	Bridgeport, Conn.
McGarey, Leo Sylvester		E. E.	109½	Junction City
McGarraugh, Robert Smith		Eng.	55	Columbus
McGill, William Yates		E. M.	51½	Ely, Nevada
McGovern, Harry William		Eng.	14	Dresden
McGrew, Carl A		Arch.	91	Martins Ferry
McIntosh, Roscoe Everett, M. E. in E. E		.....	...	Ravenna
McKee, Benjamin Franklin		Eng.	2½	Warren
McKeon, Robert Dale, C. E		.....	...	Arcanum
McKitrick, Charles J		Eng.	34½	Cambridge
McLaren, James Walter		E. E.	88½	Marietta
McLean, Arthur Tappan, Jr		Eng.	55	Greenfield
McMaster, Carlos Lenox		C. E.	97½	Columbus
McMullin, Roy		E. E.	87½	Columbus
McOwen, Thomas		C. E.	155	Ovid
Nagel, Harry		E. E.	91	Wapakoneta
Nelson, Fred Burgess		C. E.	137½	Olmsted Falls
Nesbitt, Charles Edward		Chem.	113½	Columbus
Nesbitt, Frederick Cookman		E. E.	94½	Columbus
Nesbitt, Roy Henderson		Eng.	55½	Akron
Nichols, Harry Birdsall		C. E.	173½	Painesville
Nold, Frederick B		Eng.	55½	Columbiana
Nye, Ralph D		E. E.	167	Zanesville
Oeden, Carl Edward		Eng.	54½	Miamisburg
Ogan, Mark		Special	77½	McArthur
Ogden, Ellsworth		Cer.	129½	Columbus
Ong, Howard John		Eng.	15½	Smithfield
Orndorf, Earl Luther		Chem.	161½	Wauseon
Osborne, Liphe Andrews		M. E.	108	Columbus
Overman, Edward Orton		Eng.	49½	Waverly
Ozias, Clifford Wheatley		Eng.	46	Lewisburg
Panter, Thomas Alfred		E. E.	186	Niagara Falls, N Y
Parker, Luther Albert		Eng.	31½	Hamilton
Parkin, William Z		M. E.	132	Columbus
Parrett, Benjamin Creamer, Bc. in Chem.		.....	...	Washington C H
Pattison, Charles Louis		Eng.	22½	Elkland, Pa.
Pavey, Vernon Frederick		E. E.	111½	Leesburg
Pease, Arthur Hamilton		Eng.	27	Gillett, Wis.
Peach, Arthur C		Cer. (S.)	5	Macomb, Ill.
Peck, Alfred Steven		Special	96	Cleveland
Pelton, Forrest Bertrum		E. E.	109½	Chagrin Falls
Pence, Harry Langley		Eng.	49½	Columbus
Peters, Herbert Zebulon		Eng.	59	Hooker
Petersen, John William		Arch.	173½	Port Clinton
Pettit, Harry Samuel		Eng.	48	Youngstown
Pettit, James Myron		E. M.	90	Youngstown

	Course	Course Hours	Credit Hours	Home Address
Pew, William Harper		Eng.	51	Youngstown
Pheneger, Charles Rudolph		C. E.	71½	Cleveland
Phythyon, Harry		E. M.	108½	Wheeler, Pa.
Pierce, Ernest		M. E.	102½	Lorain
Pierce, Raymond		Eng.	54½	Springfield
Pleukharp, Irwin Hiram		Special	117	Columbus
Pluddemann, Paul Washington		E. E.	112½	Columbus
Pocock, Paul Curtis		Eng.	51½	Iberia
Poto, William L.		Eng.	9	Alliance
Powell, Ivan Elno		E. E.	114½	Alliance
Prince, George Wallace		Eng.	52½	Pierpont
Pulling, James Meek		Eng.	11	Columbus
Quackenbush, Edward Joseph		Eng.	2	Schenectady, N. Y.
Ralston, Ralph Ray		Cer. (S.)	5	Macomb, Ill.
Ramsey, Ernest Cope		Eng.	38½	Columbus
Ranney, Archie Edward		Eng.	26½	Akron
Rapalje, Ernest Harold, B. S.		Special	...	Plainfield
Rarey, Ralph Forrest		Eng.	23	Columbus
Rasor, Bingham Lee		E. E.	47	London
Reed, Nathaniel Garfield		M. E.	166½	Youngstown
Rees, John Daniel		Eng.	49½	Oak Hill
Reynolds, John Neil		Eng.	11	Columbus
Ribot, Antonio		E. E.	94½	San Juan, Porto Rico
Rice, Ray Howard		C. E.	105½	Corning
Richards, Harry		Cer. (S.)	...	Columbus
Richards, Joseph Garfield		Special	13	Struthers
Rickard, Everett Bernon		Eng.	44	Columbus
Ricketts, Karl R.		Eng.	28	Columbus
Ricketts, William Corwin		Eng.	42½	Dayton
Riddle, John Scott		E. E.	117½	Barnesville
Rigdon, Carl		Eng.	55½	Wapakoneta
Rightmire, Robert Elwood, M. E.		.....	...	Wheelersburg
Ritchie, George Alexander		C. E.	175½	Hudson
Roberts, Marcus Garfield		Chem.	114½	West Mentor
Robinson, Richard Walton		Eng.	58½	Whetstone
Rodriguez, Cirilo Leonardo		C. E.	58½	Puerto Principe, Cuba
Rose, Claude Custer		Eng.	55½	Duvall
Ross, Calvin Burt		E. E.	168½	Birmingham, Ala.
Royon, Edward Donald		M. E.	93½	Houston
Rudisell, Wesley Haven		Eng.	22½	Mt. Lake Park, Md.
Ruggles, William Clavell		C. E.	20½	Clarksville
Rupert, Jesse Solomon		E. E.	56½	New Waterford
Rush, Cecil Bertram		Eng.	49½	Mt Vernon
Sandison, Jack Morrison		Special	118	Moberly, Mo.
Sanzenbacher, Walter Otto		Eng.	42½	Piqua
Sargent, Edward Chester		C. E.	75½	Columbus
Savage, Luke Francis		Special	20	McKeesport, Pa.
Sayers, Delbert, Bancroft		E. M.	177	Marits
Scanlan, John Patrick		C. E.	32½	Lancaster
Schaaf, Downs		Eng.	55	Columbus

	Course	Course Hours	Credit Hours	Home Address
Scheetler, Bruno	E. M. (S.)		59	Wellston
Schertz, William Arthur	E. E.		97½	Hamilton
Schlafly, Raydon Karl	C. E.		161½	Mt Eaton
Schoenlaub, Thomas Jacob	C. E.		158	Marion
Schott, Alvin Christian	Chem.		104	Massillon
Schubert, Charles Wesley	C. E.		161½	Columbus
Schultz, August Charles	C. E.		155	Sandusky
Schumacher, Ferdinand Albert	M. E.		61½	Ira
Schupp, Peter	Eng.		46	Fostoria
Schwab, Frank Wilbert, B. Sc. in Chem.				New Philadelphia
Senter, Herbert Pike, C. E.				Columbus
Shaeffer, Raymond	Eng.		28	Coshocton
Shapter, George Hoadley	Eng.		53½	Columbus
Sheehy, Harry Wade	Ind. Arts (S.)		35	Bridgeport, W.Va.
Sheldrick, Fred Ferdinand	Eng.		51½	Chatham, Canada
Shepard, Harvey Leonard	Chem.		151	Cincinnati
Sherman, Sylvester Morril, Jr.	Eng.		47	Columbus
Shoemaker, Clifford	Eng.		52	Grogan
Shrock, John Huber	M. E.		73½	Newark
Sifrit, Earl Deward	Ind. Arts (S.)		27	Dayton
Sill, Edgar Townsend	E. E.		111½	Fostoria
Sincoe, George	Cer. (S.)		53	North East, Md.
Singer, Lewis Parmelee	Cer. (S.)		150½	Lewisburg
Singleton, Fred	M. E.		109½	Columbus
Small, James Bentley	Eng.		61½	Columbus
Smith, Archie W.	C. E.		100½	Martins Ferry
Smith, Carl Joseph	Eng.		55½	North Broadway
Smith, George Hagerty	E. M.		98½	Updegraff
Smith, Hubert Paul	Eng.		43½	Pittsburg, Pa.
Smith, Harry Ford, M. E.				Lexington
Smith, John Albert	Eng.		55½	Arcanum
Smith, Roy Brooke	M. E.		149½	Columbus
Snyder, Earl William	E. E.		79½	Mt Hope
Snyder, Edgar Willis	Special		72	Wooster
Snyder, Jesse Casper	Eng.		64½	Sandusky
Soler, Ysidro Brunet	Eng.		46	Pinar del Rio, Cuba
Sosman, Robert Browning	Chem.		203½	Chilicothe
Speer, Carl Hall	Eng.		67	Hamilton
Spitler, Grovey Otterbein	Chem.		159½	Van Buren
Sproat, Amasa Delano, E. M.				Chillicothe
Stanton, Fredric Moses	Chem.		93½	Ridgeville
Stellhorn, Adolf, A. B.	C. E.		161½	Columbus
Stephani, William Joseph	Cer.		120½	Belleville, Ill.
Stewart, Alton LeRoy	E. E.		128½	Findlay
Stewart, Selden Lewis	M. E.		104½	Struthers
Stewart, Walter Straight	Eng.		55	Mannington,W Va
Stocker, James Arthur, C. E.				Guadenhutten
Stokely, Ray	E. E.		83½	Roseville
Stone, Thomas Wade, M. E.				New Bremen
Story, John Burnham	Eng.		12	Chillicothe
Strom, Lewis H.	Eng.		43½	Hillsboro, N. Dak.
Strong, Jonathan Edgar	Eng.		31½	Columbus

	Course	Course Hours	Credit Hours	Home Address
Stull, Raymond Thomas, E. M. in Cer.	.....		...	Elkland, Pa.
Sullivan, Frederick William	Eng.		36	Middletown
Tanner, Edward Wood, M. E.	.....		...	Zanesville
Tansey, Howard Fred	Ind. Arts (S.)		80½	Franklin
Taylor Carl Rutherford	Eng.		13½	New Baltimore
Taylor, Frank Crites	Eng.		2½	New Philadelphia
Taylor, William Oliver	E. E.		163½	Urbana
Templin, John Richard	M. E.		164½	Salem
Theobald, Adolf Otto	Eng.		41	Columbus
Theobald, Paul Frederick	E. M.		51	Columbus
Thomas, Edward	Chem.		139½	Navarre
Thomas, Herbert Spencer	Eng.		81½	Wheeling
Thompson, Howard Clark	E. E.		63	Columbus
Thompson, Thomas	E. M. (S.)		91	Shawnee
Tillman, John Henry	Eng.		43½	West Sonora
Tobitt, Fred Arthur	Eng.		4½	Middletown
Tobitt, Walter John	Eng.		21½	Middletown
Torrance, Harry Mott	Ind. Arts (S.)		16	Wapakoneta
Trish, George	Special		59½	Nevada
Trish, Henry Day	Eng.		70½	Nevada
Tucker, Charles Stanley	C. E.		66½	Clarksville
Turnbull, Lancelot	Cer. (S.)		27	East Liverpool
Umberger, Kyle David	Ind. Arts (S.)		42	Wytheville, Va.
Vale, Chester Colton	Chem.		105½	New Carlisle
Vandenbark, Weldon	Eng.		50½	Zanesville
Van Dorn, Horace Bishop, Jr	Eng.		43½	Red Bank, N. J.
Van Dyke, Clifford Steele, M.E. in E.E.	.....		...	Ansonia
Van Leuven, Cornelius, B. S.	Cer. Spl.		35	Kingston, N. Y.
Van Tine, Charles Hovey	M. E.		149	Tiffin
Van Wye, Frank Pierce	Eng.		2½	Warren
Vennum, George Carl	Eng.		37	Martins Ferry
Wagner, Arthur Julius	Eng.		55	Hartwell
Wallace, Edward	M. E.		137½	Cincinnati
Ward, Kenneth Baker	Eng.		68½	Painesville
Ward, Vernon C., Jr	M. E.		171	Columbus
Watt, Earl Blakemore	Eng.		39½	Barnesville
Watters, Burr Sells	M. E.		109½	Columbus
Way, Karl Martin	Eng.		46	Youngstown
Weaver, George H	Eng.		55	St Louisville
Weaver, Rolland Merton	Eng.		49½	Warren
Webber, Frank Merrill	E. E.		164½	West Richfield
Weedon, Homer Hill	Eng.		25	Cambridge
Weeks, Charles Martin	C. E.		72½	Marietta
Weinland, Hermon Goodwin	M. E.		97½	Springfield
Welch, Woodson Payne	Arch.		123½	Frankfort, Ky.
Wellbaum, Arvy E., M. E.	.....		...	Brookville
Welliver, Marc E.	Eng.		50½	Hamilton
Wells, Ralph P.	Eng.		18½	Lisbon
Welshymer, Colin Clifton	Ind. Arts (S.)		20	Mt Vernon
White, Fredrick Lewis	Ind. Arts		56½	Gambier
White, Martin Grove	Eng.		12½	Washington C. H.
Wilcox, Carl Clifford	M. E.		165	Columbus
Wilcox, Miller Marble	C. E.		45	Berea

	Course	Course Hours	Credit Hours	Home Address
Wildermuth, Troy Breslan	Cer. (S.)		92½	Columbus
Wilkinson, Clarence Moody	M. E.		99	Columbus
Williams, Samuel Byron, Jr.	Eng.		65½	Dayton
Williams, Emrys Treharn	Eng.		...	Akron
Williams, Ernest D.	Eng.		55	Martins Ferry
Williams, Harry Ernest, M. E.	...		...	Harlem
Willis, Willard Ephraim	Eng.		9½	Willoughby
Willock, Eber Clarence	Eng.		9½	Pomeroy
Wilson, Joseph Henry	Eng.		51½	Steubenville
Winans, Francis Marion	Eng.		42	Galion
Wingard, Todd Albert	Eng.		52½	Columbus
Winger, Stanley DuBoise	M. E.		166½	Springfield
Wishart, James Benjamin	Eng.		34	Columbus
Witman, Dwight Newcomb	Special		92	Columbus
Wolf, Albert Burton	Eng.		14	Circleville
Wolf, John Warren	Eng.		...	Springfield
Wolf, Richard Ludwig	Cer.		101½	Detroit, Mich.
Wolfe, Arthur Clifton	Eng.		55½	Mt Vernon
Wood, Paul J.	E. E.		74	Rockport, Ind.
Wyer, Samuel S.	M. E.		160½	Barbarton
Wylie, Arthur Raymond	E. E.		77½	Reynoldsburg
Wynne, Francis Edmund, B. A., M. A., E. E.	...		...	Bethany, W. Va.
Yore, Burnett	E. E.		11½	Rushsylvania
Yost, Lloyd, M. E.	...		...	Somerset
Youmans, W. Raymond	E. E.		165½	Pataskala
Young, Ralph A.	Special		27	Columbus
Young, Thomas Bruce	E. M. (S.)		48	Vanderbilt, Pa.

To determine the number of hours required for each degree see current catalogue of the Courses of Study.

COLLEGE OF LAW

COLLEGE OF LAW — 188

	Year	Home Address
Abt, Oscar M.	Second	Canton
Aldrich, Wesley Richard	Second	Columbus
Ammon, Harry Delbert	Second	Potsdam
Armstrong, Daniel Hinkle	Second	Jackson
Baker, Harry Daniel	First	Newark
Beal, Edwin George A. B., Ohio Wesleyan University.	Third	Bucyrus
Bechtol, John M.	Third	Fayette
Billingsley, Thomas Arthur	Second	Covington
Bish, Charles V.	Third	Columbus
Bostwick, Homer Z.	Third	Columbus
Brown, August Joseph	Special	Wapakoneta

	Year	Home Address
Brown, William Craig..... A. B., Wooster.	Third	Mt Pleasant
Burkey, Charles Paul.....	Second	Pleasantville
Burr, Karl Edward..... A. B., Princeton.	Second	Columbus
Campbell, William Goble.....	Second	Preston
Clark, George Maitland.....	Second	New Richmond
Clark, Lawrence Hayes.....	Third	Cumberland
Clark, William Whittier.....	Third	Canton
Cochran, Jesse Warren.....	First	West La Fayette
Cockerill, Orville Porter.....	First	Washington C. H
Collier, Wayne	Second	Millersburg
Collins, Walter Scott, B. A.....	First	Columbus
Corwin, Raymond	First	West Manchehster
Crawford, Ruel Hamlin.....	Second	Port Clinton
Curtis, Curtis Cicero.....	Third	Columbus
Davidson, Harold Glenn.....	Second	Dayton
Davis, John Wellington.....	Second	Ohlstown
Devaul, John Garfield.....	Second	Woodsfield
Devaul, Olive Blanche.....	Special	Woodsfield
Dietz, Clayton Rudolph.....	Second	Trenton
Dodds, Frank Wylie.....	Third	Xenia
Doty, Boyd Patterson.....	Second	Lexington
DuBois, David D.....	Second	Bellaire
Durand, Charles Homer.....	Second	Toledo
Durbin, Floyd Elmer.....	First	Hamilton
Duval, Marshall Ney.....	Second	Steubenville
Eagleson, John Hervey, B. A.....	First	Columbus
Eagleson, Joseph Pentecost, B. A.....	Second	Columbus
Emory, Charles Merton.....	Second	Flatt
Evans Thomas Daniel.....	Third	Newark
Fisher, Clarence A.....	First	Steubenville
Ford, Emmet H.....	Second	Celina
Frebis, Frank Xavier.....	First	Ripley
Freshour, William McDowell.....	Second	Troy
Game, Francis Harvey.....	First	Canal Winchester
Gardner, Howard Julius.....	Second	Kent
Glick, Frank Morris.....	Third	Amanda
Godown, Harry Clayton.....	Second	Hilliard
Gurney, Rexford R.....	Second	Mansfield
Harris, Lorin Benjamin.....	Third	Salem
Haskell, Norman Ruel.....	First	Ottawa
Hauss, Eugene Augustus.....	Third	Wapakoneta
Hay, Dwight George.....	Third	Wooser
Hayward, Claudius C.....	Third	Ironton
Hempstead, David King.....	Second	Wilmington
Himmeger, John William.....	Second	La Rue
Hinkle, Lester E	Second	De Graff
Hirsch, Leonard C.....	First	St Marys
Hite, William A.....	Third	Thornville
Hoeffler, John B.....	First	Woodsfield
Holmes, Lawrence Asa..... A. B., Franklin College.	First	Columbus
Hoppes, George Lewis.....	First	Eber

	Year	Home Address
Horton, Edward Hugh	First	Toledo
Hosler, William E.	Second	Laurelville
Houle, Frank Gaydon	Third	Bellevue
A. M., Western Reserve.		
Housel, William J.	First	Columbus
Huffman, Jessiah Ross	First	Attica
Hummell, Edwin Ray	Third	Carroll
Humphrey, Oliver Perry	Second	Glenmont
Hunt, Joy H.	Second	Columbus
Huston, George Enos	Second	Millersburg
Johnson, Charles Foster	Third	New Albany
Johnston, Robert Royal	Second	Marietta
Jones, David Thomas	Third	Youngstown
Juniper, Charles Walter	First	Nelsonville
Kahle, James Byron	Third	Tedrow
B. Ph., Hiram College.		
Karshner, George M.	First	Columbus
Keating, David Thatcher, B. Ph.	Third	Columbus
Kellough, Robert Wallace	Third	Range
Kelly, J. Reid	Second	Lakeside
Kemp, Lebbens Custer	Second	Lancaster
Kennard, Oron Ellsworth	Third	Chester Hill
Kerr, Floyd Ellis	First	Tippecanoe City
King, Robert James, B. A.	Third	Zanesville
Kinugawa, Taro	Second	Nagoya, Japan
Kirn, Edward George	First	Lancaster
Koenig, Jacob T.	First	St Marys
Kohr, Paul Homer	First	Columbus
Kramer, John Franklin	Third	Butler
A. B., Ada Normal.		
Kremer, Theodore John	Third	Miltonsburg
Lambert, Elza J.	Second	Plantsville
Lang, Thomas W.	First	Findlay
Laybourne, Lawrence E.	Third	Springfield
Leach, Charles Albert	First	Peerless
Leas, Charles Russell	Second	West Sonora
Leeper, Charles Foster	Second	Marietta
Leonard, Ralph Sherman	Third	Granville
A. B., A. M., Denison.		
Lerch, Ira William	Third	Canal Fulton
Lindsay, George Wilbur	Second	Commercial Point
Lisle, Thomas G.	First	Columbus
Lloyd, Erastus Guy	Third	Westerville
Loughrey, John Larison	First	Marysville
Luckhart, Cyrus Floyd	Third	Columbus
Mack, Egbert Hiram	First	Sandusky
Madden, Ernest C.	Second	Columbus
Maxwell, Earl Frederick	Second	Xenia
Miller, Frederick Augustus, B. Ph.	First	Columbus
Milligan, Charles Clinton	Second	Gnadenhutten
Moloney, William Patrick	Second	Codding
Montgomery, Charles Wesley	First	Newark
A. B., Denison.		

	Year	Home Address
Moore, Lyman Gooderl	Second	Quaker City
B. Sc., Ohio Normal.		
Moore, Winfield	Third	Alledonia
B. Sc., Ohio Normal.		
Moyer, Jesse William	Third	Wilmot
McAllister, Earl Saddler	First	Columbus
*McCormick, Earl Dudley	Second	Logan
McDermott, Robert B	Second	Coshocton
McGarry, James Francis	Third	East Liverpool
McGirr, William	First	Columbus
A. B., Ohio Normal.		
McSweeney, Frederic Milton	Third	Sidney
Naef, Otto William	Second	Conneaut
Nash, Owen Arthur	Third	Newark
A. B., A. M., Denison.		
Nesbitt, David M	Second	Bellaire
Newby, Wilbur	First	Hillsboro
Newcomb, Ralph O	Second	Columbus
Page, Walter, Jr	Second	Columbus
B. A., Yale.		
Parsons, George M	Second	Columbus
Pontius, Hubert C	Third	Canton
A. B., Wittenberg.		
Porter, Clyde C	Second	Tiffin
B. Sc., Heidelberg.		
Postle, Carl Haldy	First	Columbus
Pruner, William Reist	Third	Springfield
Ragan, Eleanor Virginia	Second	Napoleon
Raudabaugh, Orvelle	First	Celina
Riddle, Abner E	Second	Columbus
Roebuck, Carl Fletcher	Third	Dalton
Ross, Howard Joseph	First	Zanesville
Rowe, William Curtis	First	Staunton
Royon, Joseph Charles	Third	Houston
Ruth, Frank E	First	Columbus
Sayre, Charles Boyd, B. A	First	Columbus
Scarlett, Henry Launcelot	Second	Columbus
Schneider, Earnest True	First	Dayton
Schoedinger, Frederick H	Third	Columbus
Searl, Fernando Cortez	Second	Portsmouth
Shannon, Francis William James	Special	Columbus
Sharp, Stephen Albert	Second	Columbus
Sheetz, George William	Third	New Washington
Sherman, Thomas M	Second	Columbus
B. Sc., National Normal University.		
Shoemaker, William Allen	Second	Zanesville
Shotwell, Franklin Albert	Third	Marengo
Sigrist, Charles Ferdinand	Second	Congress
Smith, Philotus M	Second	Egypt
A. B., Franklin College.		
Snow, Mason J	Third	Columbus
Sparks, Homer Haven	Third	Columbus

*Deceased.

	Year	Home Address
Spurrier, Emery Allen	Third	Chester Hill
Stahl, Charles Henry A. B., Ohio Normal.	Third	Winesburg
Starkey, Neil B. Sc., Ohio Normal.	Second	Zanesville
Steinemann, George Charles	Third	Minster
Stewart, George Francis	First	Coshocton
Stewart, Gilbert Holland, Jr	Second	Columbus
Tangemann, Theodore H	Third	Kettlerville
Taylor, Edward George	Second	Kenton
Taylor, Everett Buren	Third	New Albany
Taylor, Roy C	First	Washington C. H.
Taylor, William Harry	First	Columbus
Thomas, Emmett Price	Second	Kent
Thompson, Ernest B. Sc., Ohio Normal.	Third	Bellefontaine
Tilton, Josephus H	First	Jelloway
Tolliver, Harry Griffy	First	Rendville
Tuttle, Alonzo H	Second	Decatur, Ill.
Vail, Charles A Ph. B., Scio College.	Third	Scio
Veneman, Nevin Edward	Third	Dayton
Voorhees, William Doyle Ph. B., Scio College.	Second	Scio
Wagner, Jonathan Franklin	Second	Kansas
Wagner, Oscar Cecil	Second	Kingston
Wallace, John Charles	Third	East Liverpool
Walsh, George E	Second	Columbus
Waltimire, George C	First	Deshler
Wander, Charles Benjamin	First	Mt Vernon
Weaver, David Sherman	Second	Columbus
Weber, Alonzo Christian	Second	Lewisville
Westwater, James Gulick	Third	Columbus
Wheeler, Ralph Harold	Second	Canton
Williams, Louis Boyer	First	Dayton
Wilson, Charles R	Second	Circleville
Wise, Charles Clifton Ph. B., Hiram College.	Third	Millersburg
Wolf, Benjamin Jacob	First	Gnadenhutten
Woods, William Burroughs	First	Garrettsville
Yost, William Frank	Third	Minerva
Young, Theodore A	Third	Somerset

COLLEGE OF PHARMACY — 40

	Course	Course Hours	Credit Hours	Home Address
Abbott, Frank K.	Short	106	12	Columbus
Ackerman, Graham Burt	Long	207½	104½	Columbus
Anderson, Oren J.	Long	208	27½	Newark
Art, Joseph Leonard	Special	...	...	Columbus
Ashinger, William Estley	Short	106	10	Upshur
Atkinson, Harry Churchill	Long	208	55½	Pataskala
Baltzly, Stanley M.	Short	110	113	Massillon
Bartlett, William Summer	Short	106	...	New Lexington
Beatty, Hugh Gibson	Short	106	59	Washington C. H.
Beeler, Clyde S.	Short	106	60	Hamilton
Bell, Joseph Mitchell	Long	208	3	Stantontown
Block, Arthur William	Short	110	124	Galion
Bradfield, James Dale	Long	208	1	Danville
Brown, William Roska	Short	110	102	Elyria
Campbell, Clyde Albert	Short	106	21	Columbus
Dickerson, Archie H.	Short	110	105	Louisville, Ky.
Duncan, Alonzo John	Short	106	31	Columbus
Funk, Roy William, B. Sc.	.....	...	...	Chester Hill
Gardner, Giles Edward	Special	...	26	Columbus
Grau, Charles Haarstrick	Long	207½	53½	Lucas
Hancock, William Stuart	Short	110	117	Wytheville, Va.
Hidden, Harry Stuart	Long	208	36	Madisonville
Higgins, Ernest J.	Short	110	120	Adrian
Horn, John David	Short	106	...	Delaware
Inman, Lee Earl	Short	106	...	West Elkton
Johnson, Columbus	Short	110	78	Louisville, Ky.
Jones, Benjamin Evans	Long	208	14	Jackson
Jones, Oran Wilson	Short	106	...	Springfield
Krabill, Jesse Elden	Special	...	64	Columbus
Landacre, Walter Alexander, B. Sc.	.....	...	...	Columbus
Lewis, Stanley Justin	Short	106	...	Lebanon
Lytle, George Winfield	Long	208	12	Waterville
Miller, William Edward	Short	106	17	Bucyrus
McBride, Charles Robert	Short	110	120	Allentown
Nutt, Owen Herbert	Short	106	43	Beaver
Sallady, Waltz Sumner	Short	106	12	Derwent
Salt, Clifford Green	Long	208	10	Columbus
Sperry, Walter Asa	Long	208	40	Columbus
Webb, Edward Nathan, B. Sc.	.....	...	...	Rome
Wilson, Milo DeLoyd	Short	110	103	Bowling Green

COLLEGE OF VETERINARY MEDICINE—67

	Course Hours	Credit Hours	Home Address
Anders, Thomas Olin	171	108	Fremont
Armstrong, George Dye	171	10	Logan
Atherton, William Thomas	171	90	Carrollton
Atkins, Peyton D	171	42	Hallsville
Bard, J. Eldoras	171	42	Sodom
Baster, John Taylor	171	18	Madison
Bauman, Ernest Henry	171	52	Dundee Lake, N J
Barer, Alvin Franklin	171	52	Krumsville, Pa.
Beaver, Ernest	171	13	Perrysville
Bender, John Ellis	171	117	Louisville
Betts, Sugar Turner	171	68	Cambridge
Boggs, Howard Shannon	171	52	Kingston
Breckenridge, William Kemper	171	87+68	Watertown
Brobeck, Ivan	171	52	La Rue
Brown, Harry Wilbur, D. V. M.	...	...	Columbus
Bullock, Alfred Davis	171	52	Milwaukee, Wis.
Burke, Edgar	171	49	Bethel
Butcher, James Clyde	171	52	Wapakoneta
Carril, Pedro Leon del	171	79+35½	San Juan, S. A.
Choate, John Wesley	171	99	Columbus
Churchman, Morris Harper	171	63+25	Jerome
Cook, George Edward	171	113	Tedrow
Dilts, Charles Roy	171	52	Thornville
Dock, Norton	171	124+41	Cincinnati
Eckhart, Martin W	171	18	Columbus
Forrester, Harry Arthur, V. S.	...	...	Reynoldsburg
Funes, Thomas L	171	89	Buenos Ayres, SA
Gonsebott, Luis	171	80	Entre Rios, S. A.
Graver, Herman Henry	171	...	Elmore
Heacock, Clyde Clark	171	116	Beloit
Henderson, Charles Logan, V. S.	...	...	Crescent
Herrold, Charles Hoyt	171	52	Starr
Holm, Robert Edwin	171	57	Welshfield
Ibanez, Edwardo Benedicto	171	47	Catamarca, S. A.
Inderrieden, Joseph Henry	171	24	Loramie
Johnson, Theodore C	171	124+30	Akron
Johnston, Carl Arthur	171	52	Akron
Langdon, Elmer	171	62+40	Sabina
Laughlin, Horace Wade	171	47	Belle Center
Lipp, Charles Clinton	171	116	New Middletown
Lipp, George Arthur	171	52	New Middletown
Mallow, Harry	171	51	Washington C. H.
Marquardt, Samuel Jacob	171	52	Monroeville
Martin, James H	171	9	Cincinnati
Maynard, Lee	171	52	Ross
Meiche, Lomis Hayes	171	123+56	North Royalton
Michael, Victor	171	52	Farmersville
Miller, Ernest R	171	10	Miamisburg
Moreno, Regino Teodoro	171	104	Corrientes, S. A.

	Course	Course Hours	Credit Hours	Home Address
Musser, Robert Claud		171	57	Buckland
Oden, George W		171	55	Akron
Pettiford, Oscar Collins, V. S		...	...	Wauseon
Planz, John		171	52	Akron
Porter, Frederick William		171	52	Augusta, Ga.
Prahl, John Frederick		171	13	Akron
Ralston, Wyatt Elgin		171	52	Findlay
Redhead, William H		171	45	Glenville
Reynolds, Howard Capwell		171	47	Factoryville, Pa.
Rietz, John Harrison		171	116+4	Gilmore
Sater, Clinton Huron, D. V. M		...	...	Sater
Severn, Warren, V. S		...	...	Cuba, N. Y.
Shepard, Henry Glen		171	37	Sulphur Grove
Skeels, Herbert Tressel		171	47	Massillon
Skidmore, Don I		171	52	West Mansfield
Smith, William Morgan		171	...	Basil
Sola, Ernesto		171	83	Salta, S. A.
Springer, Samuel Elza		171	52	Lakefork
Way, Lynn J		171	52	Youngstown
Worthington, William D		171	52	Pleasant Corners

GENERAL SUMMARY

College of Agriculture and Domestic Science—		
Graduate Students	2	
Undergraduates	196	
		198
College of Arts, Philosophy and Science—		
Graduate Students	47	
Undergraduates	403	
		450
College of Engineering—		
Undergraduates	585	
		585
College of Law		188
College of Pharmacy		40
College of Veterinary Medicine		67
Total		1,528
Names counted twice		12
Net total		1,516

SUMMARY BY COUNTIES

Adams	3	Hamilton	20	Noble	4
Allen	7	Hardin	3	Ottawa	5
Ashland	10	Hancock	5	Paulding	1
Ashtabula	10	Harrison	3	Perry	15
Athens	5	Henry	7	Pickaway	9
Auglaize	20	Highland	6	Pike	5
Belmont	15	Hocking	7	Portage	12
Brown	6	Holmes	7	Preble	18
Butler	25	Huron	7	Putnam	5
Carroll	4	Jackson	14	Richland	12
Champaign	12	Jefferson	11	Ross	28
Clark	13	Knox	17	Sandusky	3
Clermont	9	Lake	12	Scioto	6
Clinton	6	Lawrence	6	Seneca	11
Columbiana	20	Licking	27	Shelby	6
Coshocton	8	Logan	10	Stark	21
Crawford	11	Lorain	13	Summit	17
Cuyahoga	16	Lucas	11	Trumbull	12
Darke	11	Madison	16	Tuscarawas	10
Defiance	2	Mahoning	21	Union	13
Delaware	12	Marion	8	Van Wert	2
Erie	7	Medina	8	Vinton	3
Fairfield	21	Meigs	8	Warren	14
Fayette	19	Mercer	3	Washington	7
Franklin	459	Miami	22	Wayne	13
Fulton	11	Monroe	7	Williams	4
Gallia	3	Montgomery	48	Wood	6
Geauga	3	Morgan	16	Wyandot	2
Greene	14	Morrow	7		
Guernsey	8	Muskingum	21		

SUMMARY BY STATES AND COUNTRIES.

Alabama	1	Kansas	2	Ohio	1414
California	1	Kentucky	4	Pennsylvania	15
Canada	1	Maryland	3	Porto Rico	1
Colorado	1	Massachusetts	3	South America	10
Connecticut	2	Michigan	1	Tennessee	1
Cuba	3	Minnesota	1	Utah	1
Georgia	2	Missouri	3	Virginia	3
Germany	1	Nevada	1	Washington, D. C.	3
Illinois	10	New Jersey	4	West Virginia	9
Indiana	8	New York	13	Wisconsin	2
Japan	3	North Dakota	1		

GRADUATES

GRADUATES

The faculty of the Ohio State University are anxious to place a copy of each annual catalogue in the hands of every graduate. They will esteem it a favor if any alumnus who changes his residence will notify the Executive office of his new address and occupation. They will also be grateful for any information from any source, that may assist in making or keeping the Directory of the Alumni complete and correct.

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JAMES E. BOYD, '91, Columbus..... *Treasurer*
VERNON J. EMORY, '87, Cleveland,.....*Orator*
WM. H. PAGE, '92, Columbus.....

COMMITTEE ON NECROLOGY.

EDWARD J. CONVERSE, '86, Columbus..... Term expires 1903
BERTHA SCOTT, '90, Columbus..... " 1904
CARL G. DONEY, '91, Columbus..... " 1905

OHIO STATE UNIVERSITY ASSOCIATION OF NEW YORK.

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33 West Thirty-third street.
EMORY W. HARVEY, '96..... Secretary
11 East Sixteenth street.

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A. E. SELLENINGS, '96.....
E. W. HARVEY, '96.....

OHIO STATE UNIVERSITY ASSOCIATION OF CLEVELAND.

R. K. BEACH, '93..... President
854 Hough avenue.
JOHN F. CUNNINGHAM, '97..... *Secretary-Treasurer*
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CHICAGO OHIO STATE UNIVERSITY CLUB.

LUCIUS A. HINE, '88..... *President*
140 Fifteenth street.
JAMES G. SKINNER..... *Vice-President*
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HOWARD MONTGOMERY, '96..... *Vice-President*
W. M. FICKES, '00.....*Secretary-Treasurer*

DIRECTORY

A

Abbott, Arthur Grant, 1899, B. Sc. (Agr.) Wadsworth, Dairy Farmer.
Abbott, Royal A., 1900, B. Ph., M. A., 1902, Columbus, Ann Arbor, Mich.
Ackerman, Eli Osborn, 1884, C. E., Station B, Columbus, Engineer Maintenance of Way Columbus Street Railway Co.
Ackerman, Fremont, 1883, C. E., Los Angeles, Cal., civil engineer.
Addison, Arthur Everett, 1895, B. Ph., 1900, LL. B., Columbus, teacher East High School.
Addison, Louis Granville, 1892, LL. B., Columbus, attorney-at-law.
Addison, Clarence Maywood, 1896, B. Ph., 1900, LL. B., Columbus, 145 King avenue.
Agler, Eulalia, 1895, G. Ph. (Mrs. Whitford), Columbus, with Columbus Pharmacal Company.
Albert, Louisa Mary, 1895, B. A. (Ohio Wesleyan University), 1896, G. Ph. Mrs. A. E. Vinson, Columbus.
Aldrich, Chester H., 1888, B. A., LL. B., David City, Neb., attorney-at-law.
Aldrich, Edgar S., 1897, M. E. in EE., Manager Snohomish Electric Light and Power Company, Snohomish, Wash.
Alexander, St. Clair, 1893, M. E. in EE., stock yards, Kansas City, Mo.
Alexander, Charles P., 1896, M. E. in EE., Canton, O., District Manager Northwestern Mutual Life Insurance Company.
Allaman, William Ernest, 1896, G. Ph., Columbus, Student O. M. U.
Allen, Edward Harrison, B. A. (Ohio Wesleyan University), 1899, LL. B., Piqua.
Allen, Lucy, 1897, B. A., 1900, M. A. (Mrs. George Smart), 854 Hough avenue
Alsdorf, Percy Reed, E. M., Central City, Col., Standard Assay Office.
Alsdorf, Frederick Charles, 1892, E. M., Central City, Col., Superintendent Mt. Wilson Gold and Silver Mining Co.
Alspach, Rufus Edwin, 1897, M. A. (B. A. Heidelberg), Thornville.
Alvord, Justus Elvin, 1901, LL. B., Alvordstown.
Amos, Frank Craig, 1901, LL. B., Columbus.
Anderson, James T., 1884, B. A., Colorado Springs, Col., 1st Lieutenant U. S. Army.
Anderson, Newton, M., 1898, B. Sc., Asheville, N. C.
Andress, Edna A., 1900, B. Ph., (Mrs. Julius Stone) Columbus.
Andrews, Albion Joseph, Jr., 1893, LL. B. (B. S., Ohio Wesleyan University), Zanesville.
Andrews, Lincoln Elmer, 1893, LL. B., 1895, B. Ph., Columbus, attorney-at-law.
Armstrong, Clara, 1901, B. Sc., (Dom. Sci.), Columbus, 319 King avenue.
Armstrong, Edna, 1897, B. Ph., Columbus.
Armstrong, William H., 1890 G. Ph., Marysville, druggist.
Arnold, Charles Lincoln, 1890, B. Sc., 1894, M. Sc., West Eighth ave., Columbus, assistant professor in mathematics, State University.
Arnold, Edwin E., 1898, M. E. Westinghouse Machine Co., E. Pittsburg, Pa.
Atkins, G. Glenn, 1898, B. A., Burlington, Vt.

Atkinson, Warren, 1899, M. E., Maintenance Department New York Telephone Company, Brooklyn, N. Y.
Auld, James A., 1897, M. E. in EE., Columbus, with D. S. Auld, 76 East Gay street.
Austin, John Gustave, 1899, LL. B., Sparta.

B

Bachtell, Nellie May, 1895, B. A.
Backhaus, Henry Ward, 1894, B. A., Wapakoneta, cashier People's National Bank.
Baer, Philip, Jr., 1897, B. Sc. (Agr.), Canal Dover, Dairy Farmer.
Bagley, Anna Gertrude, 1894, G. Ph., Columbus, with Hallwood Cash Register Company.
Baker, James Burt, 1898, LL. B., Salem.
Baker, John Ezra, 1897, B. A., 1898, LL. B., Chicago, Ill.
Baker, William Hollister, 1892, B. Agr., Farmersville, Mo., farmer and stock raiser.
Baldwin, Elizabeth Grant, 1899, B. Ph., Columbus.
Baldwin, Zoa Belle, 1896, B. A. (Mrs. George Gugle), Columbus.
Ball, Danforth Ewers, 1901, B. Sc., Fellow in Astronomy, State University, Columbus.
Ball, Emma Leanna, 1895, B. Sc., 1896, M. Sc., Columbus.
Ball, Fred S., 1888, B. Ph., Montgomery, Ala., 1st National Bank Bldg., attorney-at-law.
Bancroft, Gay, 1898, B. A., Columbus, 26 West Gay street.
Barcus, Eliza D., 1900., B. A., Schenectady, N. Y.
Barcus, Miner, 1897, M. E. in EE., Schenectady, N. Y., with General Electric Company.
Barlow, Helen M., 1898, B. Ph., Columbus.
Barlow, Moses Henry, 1901, C. E., Civil Engineer Dayton Coal and Iron Company.
Barnaby, Charles L., 1898, C. E., 37 South Ninth street, assistant on Engineer Corps, Cincinnati Division, P. C. C. & St. L. Ry.
Barnaby, Josephine, 1896, B. Ph., teacher, East Cleveland.
Barringer, Lawrence Eugene, E. M., General Electric Company, Schenectady, N. Y.
Barrows, Harry Holbrooke, 1898, C. E., Assistant Engineer Alabama Great Southern Ry.
*Bartholomew, Clyde Stanley, 1896, C. E., died June 23rd, 1900.
Basterdes, Ada Mabel, 1890, B. Ph., Mankato, Minn., 509 S. Broad street.
*Bates, Josephine M., 1881 (Mrs. Florizel Smith), died ——, 1900.
Bates, Wesley C., 1882, LL. B., 35½ N. High street, Columbus, Attorney.
Baughman, George W., 1897, G. Ph., Springfield, Pharmacist.
Beach, David Price, 1895, C. E., Wellsville, Pennsylvania Railroad Assistant Engineer Corps.
Beach, Margaret Alice, 1891, B. Ph. (Mrs. Wilson Holman), Bayonne, N. J.
Beal, Edwin George, A. B., LL. B., 1902, Bucyrus.
Beale, Harry Glenn, 1902, B. Sc., Mt. Sterling.
Beardsley, Orsamus D., 1898, B. Ph., Garrettsville.
Beattie, William Renick, 1894, B. Sc., 1897, M. Sc. (in Horticulture), Washington, D. C., U. S. Department of Agriculture.

* Dead.

Beck, Arthur Andrew, 1893, C. E., Columbus, 329 S. Ohio ave., Deputy County Surveyor.
Belden, Herbert Lucius, 1902, B. Sc., Middlefield.
Belden, Sanford Bonner, 1895, E. M., Manager Pittsburg Office Jeffrey Manufacturing Company.
Bell, Florence Louise, 1900, B. Ph., Columbus, 382 East Town street.
Bell, Mary Edith, 1894, B. Ph., teacher in Central High School, Columbus.
Belows, Gertrude Halm, 1902, B. Ph., Columbus.
Beman, Lamar Taney, A. B. (Western Reserve), 1902, M. A., Cleveland, Ohio.
Bennett, Henry C., 1890, B. A., 100 Washington street, Chicago, Ill., Attorney-at-law.
Bennett, Samuel E., 1890, D. V. M., 44 Kirby street, Boston, Mass.
Bentley, William Preston, 1885, B. Agr. (B. A. 1890, M. A. 1893, Bethany College) 15 Miller Road, Shanghai, China, missionary.
Bertsch, Joseph Franz, 1896, LL. B., Columbus, 124 West Ninth avenue.
Bibbee, George E., 1897, LL. B. (A. B. Ohio Wesleyan University), Columbus, 111½ S. High street, attorney.
Biebel, Herman Matthews, 1896, M. E. in EE., Chicago, Ill., Electrical Engineer. with Western Electric Company.
Bischoff, John Wallace, 1899, E. M., Robertsdale, Pa., engineer, Rockhill Iron and Coal Company.
Bissing, William, 1893, M. E. in EE. (A. B. Johns Hopkins University), examiner in U. S. patent office, Washington, D. C.
Bittner, William Pitt, B. Ph., 1902, Sandusky, Ohio.
Blackburn, Frank H., 1896, M. E. in EE., Fostoria, Electric Engineer, Fostoria Incandescent Lamp Co.
Blaire, Edward Grey, 1895, G. Ph., Shawnee, pharmacist.
Blakiston, Anna Houston, 1897, B. Ph. (Mrs. Powell), Pittsburg, Pa.
Blakiston, Mary, 1893, B. Ph., Columbus, teacher in East High School, The Normandie.
Bleininger, Albert Victor, 1901, B. Sc., chemistry instructor in Ceramics, State University, Columbus.
Blinn, Ray S., 1893, B. S.
*Bloom, Edwin M., 1893, B. Sc., died, 1894.
Bloom, J. George, 1889, C. E., Chillicothe, division engineer B. & O. S. W. Ry., New Castle, Pa.
Bloomfield, Lloyd Morris, 1891, B. Agr., Central America.
Bock, Harrison W., 1898, LL. B., 1899, B. Ph., attorney, Pittsburg, Pa., 520 Frick Bldg.
Bock, Theodore Emil, 1901, LL. B., Hamilton, Ohio.
Bockius, Harry Graham, Ph. B. (Yale University), 1899, LL. B., 52 Broadway, New York, N. Y.
Bodman, Mary E., 1898, B. Ph. Bement, Ill.
Boehme, Adolphus Joe, 1901, M. E., Youngstown, Engineer Youngstown Iron, Sheet and Tube Company.
Boesche, Felix John, 1896, G. Ph., Denver, Col.
Boesel, Frank Tilden, 1896, B. Ph., student, Harvard Law School.
Bogue, Ernest Everett, 1894, B. Sc., H. & F., 1896, M. Sc., 43 W. Tompkins street, Columbus.
Bohn, Frank A., 1900, B. Ph., 1901, M. A. assistant in library, Ohio State University.
Bohn, William Edward, B. A. (German Wallace College), 1900, M. A., 1020 University avenue, Ann Arbor, Mich.

* Dead.

Bond, Charles Grosvenor, 1899, LL. B., Columbus, 595 Oak street.
Bone, John H., 1893, B. Sc., 1896, B. Sc., (Agr.), Shadeland, Ind.
Booth, Lucy Adelaide, 1892, M. A. (B. A., Ohio Wesleyan University), 1894, Ph. D.
Bope, George W., 1897, LL. B., Columbus, third assistant director of law, 275 East State street.
Bostwick, Homer Z., 1900, B. A., 1902, LL. B., Columbus.
Bostwick, Oliver Newton, 1902, C. E., Civil Engineer B. & O. Ry., Newark, O.
Bott, George Robert, 1901, M. E., Instructor of Drawing, Miller Manual Labor School, Miller School, Va.
Bowden, Harry W., 1900, C. E., Structural Department Illinois Steel Company, 579 E. Division street, Chicago, Ill.
Bower, Jerome G., 1897, M. E., Pressed Steel Car Co., Chicago, Ill.
Bowles, John Porter, 1902, B. Ph., Columbus.
Bownocker, John A., 1889, B. Sc., 1897, D. Sc., Columbus, associate professor of Inorganic Geology, State University.
Boyd, Emma, 1888, B. Ph., Dennison avenue, Columbus, teacher in the North High School.
Boyd, James Ellsworth, 1891, B. Sc., Columbus, associate professor of Mathematics, State University.
*Boyd, James G., 1897, D. V. M., Died 1900.
Boyd, Martin L., 1897, LL. B., Columbus, 265 East Eleventh Ave.
Bradford, Ernst, 1892, G. Ph., Columbus, chemist, with N. W. Lord, O. S. U.
Bradford, Joseph Nelson, 1883, M. E. 54 West Tenth Ave., Columbus, professor of architecture and drawing, State University.
Brand, Harry Frank, 1896, B. Ph., 1897, LL. B., Worthington.
Brandt, James Herbert, 1899, B. A., Greencastle.
Brandt, Ulysses Sherman, 1895, B. A., Canal Winchester.
Bratton, Alice, 1901, B. Sc. (Dom. Sci.), Columbus.
Braun, Joseph G., 1897, G. Ph., Columbus, 802 South Champion avenue, Pharmacist.
Brelsford, Harley, 1898, B. Ph., Christianburg.
Brewer, Charles Reed, LL. B., Bowling Green.
Brewer, John Whitney, 1896, G. Ph., Columbus, 126 West Tompkins street, Pharmacist.
Bright, Frederick I., 1900, LL. B., Logan.
Britton, John Carr, 1898, B. Sc. (Agr.), Wooster, O., assistant in Department of Nursery and Orchard Inspection, O. A. E. S.
Brier, Harvey E., 1890, D. V. M., Tippecanoe City, veterinary snrgeon.
Bronson, Herman S., 1897, LL. B. (B. L., Cornell University), Columbus, Attorney, 120 Wilson avenue.
Brooks, Stanley Grange, 1901, B. Sc., Columbus.
Brophy, James Francis, 1899, E. M., engineer for Cooper interests in Mercer and McDowell counties, Coopers, W. Va.
Brown, Albert Marion, 1901, B. Ph., Wauseon.
Brown, Frank, 1899, M. A. (A. B., Macalester College), teacher in High School, Ravenwood, Ill.
Brown, Frederick W., 1888, E. M., Engineer of Construction for Colorado Portland Cement Company, Portland, Col.
Brown, Harry Wilbur, 1902, D. V. M., Columbus.
Brown, John Quincy, 1901, M. E., Oakland, Cal., Assistant General Manager and Engineer Oakland Transit Co.

* Dead.

Brown, Newton H., 1893, M. E. in EE., Newark, Del., General Manager Rapid Transit Co., Chattanooga, Tenn.
Brown, William Craig (A. B. University of Wooster), 1902, LL. B., Mt. Pleasant.
Bruce, Charles A., 1895, B. A., Columbus, associate professor of Romance Languages, State University.
Brumley, Daniel, 1895, C. E., Roadmaster Louisville & Nashville R. R., Louisville, Ky.
Bruning, Henry Dietrick, 1896, C. E., Logansport, Ind., assistant engineer on P. C. C. & St. L. R. R.
Bryant, William Cheney, 1902, B. Ph., Columbus.
Buchenberg, Alvin E., 1900, M. E. in EE., Schenectady, N Y.
Buckman, Arthur Leslie, 1897, M. E. in EE., wire chief Central Union Telephone Co., Toledo.
Buckman, Ola., 1895, B. Sc. (M. D., Cleveland University of Medicine and Surgery), Norwalk.
Bunnell, Larone A., 1898, G. Ph., Pharmacist, Winchester, Ind.
Burgess, James Henry, 1900, B. Ph., Big Horn, Wyo.
Burkett, Charles William, 1895, B. Sc. (Agr.) 1898, M. Sc. (Agr.), Professor of Agriculture, North Carolina College of Agriculture and Mechanic Arts, West Raleigh, N. C.
Burkett, Dora Van Buren, 1897, B. Ph., Columbus.
Burns, James Ferguson, 1891, C. E., Hopkinsville, Ky., assistant engineer L. & N. Ry.
Burr, Harriett G., 1897, B. A., Worthington.
Butcher, Frederic Eric, 1901, B. Ph., Buckland.
Butler, Blanche Woodruff, 1901, B. A., teacher in High School, Wellsville.
Butler, James Marion, 1894, LL. B. (A. B. Ohio Wesleyan University), Carmel.
Butterworth, William H., 1898, B. A., Columbus, 45 North Seventeenth street.
Bygate, Harry Goldsmith, 1899, M. E., Draftsman National Steel Co., Bellaire, O.
Byers, Clara, 1894, B. Ph. (Mrs. Coles A. Raymond), Youngstown, O.

C

Cahen, Alfred, 1894, LL. B.
Calkins, George Herbert, 1895, M. E. in EE., production clerk Gen. Electric Co., Schenectady, N. Y.
Calkins, William Bartlett, 1898, G. Ph., Denver, Col., Chemist Denver Gas and Electric Co.
Callender, Sherman D., Ph. B. (Oberlin College), 1898, LL. B.
Calvin, Anthony B. (A. B. Northeastern Ohio Normal), 1900, LL. B., Youngstown, 1904 Market street.
Cameron, Harry Ezra, 1901, C. E., Structural Draughtsman, McClintic Marshall Construction Co., Rankin, Pa.
Canfield, Charles H., 1897, D. V. M., Indianapolis, Ind., Government Meat Inspector.
Canfield, Dorothea Francis, 1899, B. Ph., graduate student, Columbia University, New York City.
Canfield, Leander Randall, 1896, B. Ph., Chardon.
Cannon, Anna Cathrine, 1901, B. Ph., Columbus.
Capron, Marshall Fremont, 1888, M. E., Chief Mechanical Engineerr, Seamless Steel Tube Co., Detroit, Mich.
Carr, Hugh Stanley, 1896, M. E. in EE., Electrical Engineer, Cleveland.
Carr, James Gray, 1897, B. A., Coshocton.

Carroll, Patrick Henry, 1894, E. M., Herrin, Illinois, Supt. Big Muddy Coal and Iron Co.
Carroll, William Hunt, 1894, LL. B., Wilmington.
Carson, Eleanor Eliza, 1902, B. Ph., Harrisburg.
Carson, Samuel George, Ph. B. (Hiram College, 1901, LL. B.), Warren.
Carson, Samuel King, 1895, M. E. in EE., M. D. (Ohio Medical University), Acting Assistant Surgeon, U. S. A., Manila, P. I.
Cary, Charles R., 1900, LL. B., Millersburg.
Cathcart, Josephine M., 1888, B. Sc., 1131 Cedar avenue, Cleveland, accountant.
Canaga, George Orlando, 1895, LL. B., (B. A. Scio College).
*Catlin, Homer Clark, 1896, C. E., died March 10, 1902.
Cartwright, Henry Gilroy, 1895, LL. B.
Cavanaugh, Andrew F., 1900, M. E., draftsman, Stillwell-Bierce and Smith-Vail Co., Dayton, O.
Cavin, Frank Thomas, 1902, E. E., Westinghouse E. & M. Co., Wilkinsburg, Pa.
Cellarius, Frederick Julius, 1888, C. E., Dayton, assistant city engineer.
Chamberlain, Helena W., 1884, B. A., Mrs. Ellis Lovejoy, Union Furance.
Chamberlain, Robert Marcus, 1901, B. Sc., Columbus.
Chalmers, Agnes Florida, 1895, B. Ph.
Chappell, Walter Evans, 1898, M. E. in EE., engineer, Macartney, McElroy & Co., London, Eng., 46 Ruode Inelhas-Lisbon, Portugal.
Charters, William Filson, 1887, B. Ph., Sidney, tax inquisitor.
Chaney, James William, 1902, B. Ph., Columbus, O.
Cherryholmes, W. K., 1881, B. Sc., M. D., Hamilton, physician, 109 S. 3rd street.
Cilley, Raymond, 1896, M. E., Graham & Fox Co., Stamford, Conn
Clapp, Katharine B., 1902, B. Ph., Norwalk, O.
Clark, Alexander B., A. B. (Yale University), 1899, LL. B., Canton.
Clark, Clarence J., 1899, C. E., draftsman, Scioto Valley Traction Co., Columbus.
Clark, Herman Alfred, 1902, B. Sc., Department of Agriculture, Washington, D. C.
Clarke, James Ulrick, 1902, M. E., Bullock Electric Co., Cincinnati, O.
Clawson, Clarence Alfred, 1899, B. Sc. (Agr.), 1900, D. V. M., Trinidad, Colo.
Clay, Albert Arlington, 1893, LL. B. (B. A., Tri-State Normal College), Hicksville.
Claypoole, Bessie Smith, 1895, B. Ph., Columbus, Neil avenue.
Clapool, Charlotte Lake, 1892, B. Ph., Columbus, Neil avenue.
Clements, Frank Orville, 1899, M. Sc. (M. A., Otterbein University), Westerville.
Clevenger, Charles Henry, 1902, B. Sc., Fletcher, O.
Clum, George V., 1893, B. A., Earlville, Ill.
Clum, Harry Ernest, 1899, B. Ph., 1901, LL. B., Columbus.
Cockerill, Orville Porter, 1902, B. Ph., Washington, C. H.
Cockins, Edith D., 1894, B. A., Columbus, registrar, State University.
Coddington, Edwin F., 1896, C. E., 1897, M. Sc., Ph. D., 1902, (University of Berlin), Berlin, Germany.
Cole, George Nathan, 1891, M. E. in EE., contractor railroad supplies, 265 Broadway, N. Y.
Cole, Marietta C., 1897, B. Ph., Columbus, S. Eighteenth street.
Collins, Curtis, 1895, M. E. in EE., E. E. for S. A. Lugz Electrica & Rio Plata Electric Co., San Juan, Puerto Rico.
Collins, Walter Scott, 1901, B. A., Columbus.
Coney, William Hawks, 1894, B. Sc., Honolulu, S. I.
Conley, Clyde Grayson, 1902, C. E., Mt. Vernon Bridge Co.

* Dead.

Connell, Laura Jewell, 1896, B. Ph., Columbus, teacher of German, 433½ Long street.
Connell, William A., 1886, E. M., Secretary Va. Manganese Iron & Coal Co., Kansas City, Mo.
Connolley, Augusts, 1902, B. Ph., Columbus, O.
Connor, Alice M., 1900, B. Ph., Columbus, 44 McMillin avenue.
Connor, Ellen J., 1900, B. Ph., 1901, M. A.
Conrad, Louis Verne, 1902, C. E., P. C. C. & St. L. Ry., Logansport, Ind.
Conradi, Albert Frederick, 1901, B. Sc. (Agr.), Durham, N. H., Assistant Entomologist N. H. State College.
Converse, Edward Jasper, 1886, B. A. (B. D., Yale University), Columbus, assistant pastor, First Congregational Church, 808 North High street.
Converse, Howard Pendleton, 1887, B. Sc., Boston, Mass., 8 Oliver street.
Converse, Walter, 1899, B. A., Plain City.
Conway, Hugh Lawrence, 1896, C. E., Transitman new water works, Cincinnati.
Cope, Albert N., 1897, M. E. in EE., Columbus, assistant engineer construction, Columbus Street R. R.
Corner, Edith Carlisle, 1901, B. Ph., Columbus, 642 E. Rich street.
Corner, Florence, 1897, B. Ph., Columbus, 642 E. Rich street.
Corns, Harry, 1887, B. A., Columbus, teacher in Central High School.
Corwin, Edwin E., 1880, B. A., Columbus, attorney-at-law, 1462 Neil avenue.
Cosley, Harvey Harter, 1901, C. E., Illinois Steel Co., Chicago, Ill.
Cotes, Albert E., 1897, B. Sc., Columbus, medical student, Ohio Medical University.
Coursault, Ida May, 1899, B. Ph., Columbus, 770 East Long street.
Coursault, Jesse H., 1893, B. A. 1898, M. A., Columbus, teacher in Central High School.
Courtright, Elizabeth Pauline, 1901, B. A., Columbus (Mrs. Frank S. Knox), Grays Flat, W. Va.
Courtright, J. Loring, 1900, B. A., Columbus.
Courtright, Stella Van, 1901, B. Ph., Columbus.
Covell, Vernon Royce, 1895, C. E. Pittsburg, Pa., county engineer's assistant.
Crable, Arthur, 1901, C. E., Engineer B. & O. Co., Zanesville.
Crable, George, E. M., 1902, Columbus, O.
Craig, Moses, 1889, B. Sc. (M. S., Cornell University, 1890), 1896, M. Sc. (H. F.), Michigan Agricultural College student.
Cratty, John Mason, 1897, B. Sc.
Crawford, Mary, 1901, B. Sc. (Dom. Sci.), Blaine.
Crawford, Ira, Jr., 1893, LL. B. (B. S., Denison University), Dayton.
Crawford, William Sterling, 1888, B. Ph.
Croll, Alfred J. (A. B., Ohio Normal University), 1900, LL. B., Tontogany.
Cromley, Alva M., 1897, G. Ph., Long street and Washington avenue, Columbus.
Crooks, Charles Melvis, 1892, B. A. (B. D., Harvard University, 1896), Colerain, Mass., pastor Congregational church.
Crowner, Delbert Alonzo, 1896, B. Sc. (Agr.), Instructor, Ohio State University.
Cummins, Henry Rollins, 1891, G. Ph., pharmacitst Lake View Hospital, Cleveland, O.
Cunningham, Arthur, 1880, B. A., 107 Lincoln street, Columbus, book-keeper.
Cunningham, Charles Gilman, 1901, B. Ph., Toledo.
Cunningham, Edward Walker, 1894, C. E., Pittsburg Bridge Works, Pittsburg, Pa.
Cunningham, George S, 1886, B. Ph., LL. B., Lancaster, Attorney-at-law.
Cunningham, John Ferguson, 1897, B. Sc. (H. & F.), 1899, M. Sc. (H. & F.), Cleveland, associate editor "Ohio Farmer."

Curran, Bernard Franklin, LL. B., 1901, 15 North Fourth street, Zanesville.
Curtis, Curtis Cicero, 1902, LL. B., Columbus, O.
Curtis, Leigh Goodrich, 1899, C. E., Assistant Division Engineer, Chicago Division, Garrett, Ind., B. & O. R. R.

D.

Daily, Henry G., 1892, D. V. M., Wooster, veterinary surgeon.
Dally, John Randolph, 1899, LL. B., Centerburg.
Damron, Carson W., 1897, M. E., chief draftsman Wagner-Palmros Manufacturing Co., Fairmont, W. Va.
Daniels, David Edwin, 1893, LL. B., B. Ph., Denison University, 1896, LL. M., Columbus, 1326 Madison avenue.
Dunn, Walter M., 1902, M. E. Westinghouse E. & M. Co., Pittsburg, Pa.
Darby, Roscoe B., 1900, LL. B., Wauseon.
Davenport, Adrian E., 1897, B. A., Columbus, 220 Miller avenue.
Davidson, David Millen, 1894, B. A.
Davidson, George Edwin, 1899, LL. B., East Liverpool.
Davies, Jennie C., 1897, B. Ph., Columbus, 590 East Spring street.
Davies, John Lodwick, 1894, LL. B., Columbus.
Davis, Charles William, 1894, E. M., Colorado Springs, Col., care J. Mck. Ferridy & Co., general mining business.
Davis, Oscar Allen, 1897, M. E. in EE., Alliance, daughtsman Morgan Engineering Co.
Davis, Vernon Hays, 1900, B. Sc. (Agr.), Columbus, assistant in Horticulture and Forestry, State University.
Day, Albert Edward, 1902, B. Sc., Mt. Carmel, O.
Deahl, Walter Smith, 1896, C. E., 268 Fisk St., Pittsburg, Pa., Pittsburg Bridge Co.
Deardurff, Carl Mason, 1895, B. A.
DeLamater, Clayton William, 1884, A. B., LL. B., Omaha, Neb., attorney-at-law.
DeLoffre, Andre, 1896, M. E. in EE., London, Eng., General Electric Co., Schenectady, N. Y.
DeLoffre, Samuel Middleton, 1895, B. A.
Dennis, Jerry, 1892, LL. B., 1893, LL. M., Columbus, attorney-at-law, 690 Franklin avenue.
Denny, Charles Wampler, 1901, M. E. in EE., Sawyer Man. Electric Co., New York, N. Y.
Derby, Alice Greenwood, 1901, B. Ph., Columbus, 93 East Fifteenth avenue.
Derby, Florence Harlow, 1896, B. Ph., 1901, B. Sc. (Dom. Sci.), Columbus, (Mrs. Charles E. Haigler), 161 West Eleventh avenue.
Detmers, Frederica, 1887, B. Sc., 1891, M. Sc., 1315 Neil avenue, Columbus, teacher.
Devol, William Stowe, 1886, B. Agr., Redlands, Cal., Newspaper reporter.
De Wolf, Roger Dennison, 1901, M. E. in EE., Westinghouse Electric Co., 515 Franklin avenue, Wilkinsburg, Pa.
Dice, Jesse Peck, 1898, LL. B., Akron.
Dickinson, George Codwice, 1901, B. A., Circleville.
Dickinson, Thomas Herbert, 1899, B. Ph., Professor of Oratory, Baylor University, Waco, Texas.
Diemer, Hugo, 1896, M. E. in EE., associate professor in mechanical engineering, University of Kansas.

Dietrich, Charles Henry, 1878, B. Sc., Lexington, Ky., American Book Co.
Dietrich, George C., 1898, B. Ph., Groveport, Principal of High School.
Dill, Dille Augusta, 1900, B. Ph., Columbus.
Dill, Raymond, 1901, M. E. in EE., Westinghouse Electric & Mfg. Co., Pittsburg, Pa.
Doan, Frank C., 1898, B. Ph., Athens, Professor of Philosophy, Ohio University.
Dollison, Harvey C., 1900, B. Sc., Columbus.
Doney, Carl Gregg, 1891, B. Sc., 1893, LL. B., Ph. D., 1902, Columbus, pastor M. E. Church, 388 W. Sixth avenue.
Donham, Maurice, 1896, M. E., Warren, Pa., General Manager Jacobson Machine Manufacturing Co.
*Donham, William W., 1882, B. Sc., died Feb. 10, 1898.
Donovan, Dennis Aloysius, 1902, B. Ph., Columbus, O.
Doud, Harry Lee, Norwalk.
Dowd, Charles F., 1900, B. Ph., Toledo, 1020 Virginia street.
Dresbach, Mary, 1901, B. Sc. (Dom. Sci.), Columbus.
Dresbach, Melvin, 1897, B. Sc., Columbus, Fellow in Physiology, State University.
Drummond, William G., 1900, M. E., Columbus Forge and Iron Company.
Dubois, Wilbur L., 1900, B. Sc., 1902, M. A., Troy, O.

Dun, George William, 1884, B. Sc., Columbus, business manager "Columbus Citizen."
Dun, John J., 1883, E. M., Fifteenth avenue, Columbus, consulting engineer.
*Dun, Walter Angus, 1878, B. Sc., M. D., died November 7, 1887.
Dungan, Irvine Laird, 1892, B. Ph., Cincinnati, Lane Theological Seminary.
Dunlap, Thaddeus Cox, 1895, M. E. in EE., manager Columbus Pneumatic Tool Co., Columbus, O.
Dunlap, William Renick, 1895, B. Sc., Kingston, farmer.
Dunlap, Robert R., 1900, M. E. in EE., testing department General Electric Co., Schenectady, N. Y.
Dunnick, Edward, 1897, C. E., draftsman, Mt. Vernon Bridge Co., Mt. Vernon, O.
Durbin, Samuel Clyde, 1901, B. Ph., New Cumberland, W. Va.
Duvel, Joseph W. T., 1897, B. Sc., Wapakoneta.
Dye, Clair Albert, 1891, G. Ph., assistant professor of pharmacy, State University, Columbus.

E.

Eagleson, Grace, 1897, B. Ph., Columbus, 84 N. Ohio ave.
Eagleson, John H., 1900, B. A., Columbus, 84 N. Ohio ave., student O. S. U. Law School.
Eagleson, Joseph P., 1900, B. A., Columbus, 84 N. Ohio ave., student O. S. U. Law School.
Early, Franklin E., 1893, D. V. M.
Easterday, Charles Todd, 1891, G. Ph., Wellston, Druggist.
Easton, Ernest Doane, 1902, B. Sc., Springboro, O.
Eckhardt, Carl Conrad, 1902, B. Ph., Toledo, O.
Eddy, William, 1900, D. V. M., Cleveland.
Edwards, Mary Winifreda, 1897, B. A., New Richmond, Prin. of High School.
Egbert, Knott C., 1890, B. Agr., Supt. Indian Boarding School, Santee Agency, Neb.

* Dead.

Eisenbise, Bertha, 1900, B. Ph., Columbus, Monroe ave.
Eisenlohr, Berthold A., 1898, B. Ph., instructor, Ohio State University.
Ellis, Charles, 1889, D. V. M., 3230 Locust street, St. Louis, Mo., veterinarian to Board of Health.
Emery, Peyton Randolph, 1893, LL. B., London.
Emery, Vernon Judson, 1887, B. A. (A. M., University of Nebraska), Cleveland, assistant professor of Latin, Western Reserve University.
Erf, Oscar, 1899, B. Sc. (Agr.), Champaign, Ill., Instructor in Dairying, University of Illinois.
Erskine, John H., 1886, E. M., M. D., physician and surgeon, Albany, Oregon.
Estep, Frank Leslie, 1898, M. E. in EE., foreman Copper Rolling Mill Bridgeport Brass Co., Bridgeport, Conn.
Evans, Ernest, 1892, B. Sc., Mingo Junction, chemist, Laughlin Junction Steel Co.
Evans, Lyle Sanford, A. B. (Miami University), LL. B., 1901, Columbus.
Evans, Peter Platter, 1892, C. E., contracting engineer, Osborn bldg., Cleveland, O.
Evans, Thomas Daniel, LL. B., Newark, O.
Evans, William Lloyd, 1892, B. Sc., 1896, M. Sc., graduate student University of Chicago, Ill.
Ewalt, Clara Converse, 1901, B. Ph., Columbus, Fellow in Rhetoric, Ohio State University.
Eysenbach, Ernest E., 1896, E. M., Columbus, Superintendent Columbus Gas Co.

F.

Fairchild, Harmon Scott, 1894, LL. B., Springfield.
Farber, Charles Harker, 1894, B. A., Columbus, with State Savings Association.
Fassig, Oliver L., 1882, B. Sc., Baltimore, Md., instructor in Climatology, Johns Hopkins University.
*Fay, Frederick Willis, 1882, B. A., B Arch., died August, 1892.
Fay, Mona, 1897, B. Ph. (Mrs. Eugene Gee), Phoenix, Arizona.
Feicht, Russell Stimson, 1890, M. E. in EE., Engineering Department Westinghouse E. & M. Co., Pittsburg, Pa.
Feiel, Ida Louise, 1898, B. Ph., Columbus, 520 East Main street.
Fenner, Jesse Albertus, A. B. (Wittenberg College), 1898, LL. B., Cleveland, O.
Fergus, Guy Carlton, 1898, M. E. in EE., partner in Zanesville Electrical Co.
Fergus, John Franklin, 1892, LL. B., Columbus, attorney-at-law.
Fickes, Walter M., 1900, E. M. (Ceramics), manager Rosslyn Brick Co., Carnegie, Pa.
Finley, Harry Marshall, 1894, B. A., McConnellsville, principal of High School.
Fippin, Elmer Otterbein, B. Sc. (Agr.), Washington, D. C., Department Agr.
Fischer, Paul, 1891, B. Agr., D. V. M., professor of Pathology, State University, Columbus, O.
Fischer, Robert, 1895, G. Ph., 1896, M. Ph., 1898, B. Sc., Wilmington, Delaware, Krebs Pigment and Chemical Co.
Fischer, Walter, B. Sc., Columbus, Madison ave.
Fish, Fred Alan, 1898, M. E. in EE., assistant professor Electrical Engineering, State University.
Fisher, Clara, 1886, B. A. (Mrs. J. Porter Milligan), Columbus, 1108 Dennison ave.

* Dead.

Fisher, Georgietta, 1895, B. A., Columbus, 1108 Dennison avenue.
Fisher, Ida May, 1900, B. Ph., Columbus, E. Rich street.
Fitzgibbon, James Robert, 1894, LL. B., Newark.
Fitterer, John Conrad, 1898, B. Sc., Bucyrus.
Flickinger, George A., 1898, B. Sc. (Agr.), Knoxville, Tenn., instructor in Dairying, University of Tennessee.
Floto, Julius, 1889, E. M., Chicago, Ill., Anaconda Copper Mining Co., Anaconda, Mont.
Flynn, Benjamin H., 1898, C. E., Columbus, Eng. with State Board of Health.
Flynn, Harry Franklin, 1892, C. E., Washington, D. C., U. S. Geodetic and Coast Survey.
Flynn, Maud, 1896, B. Sc., Columbus, student, 40 East Fifth avenue.
Flynn, Oscar Rodgers, 1896, B. Sc., 5802 Jackson avenue, Chicago, Ill.
Foley, William J., 1894, D. V. M., Lexington, Ky.
Ford, Nile Otis, A. B., M. Sc. (Washington and Jefferson), 1901, E. M., engineer Lakouta Gold Mining and Reduction Co., Hill City, S. Dakota.
Ford, Ruth L., 1898, B. A. (Mrs. Lorenzo Carlisle), Ashtabula, O.
Ford, Stanley Hamer, 1898, B. Ph., 1st Lieut. in U. S. Army.
*Forgy, Ralph Morris, 1896, B. Ph., died March, 1899.
Foster, Dudley Hampton, 1895, B. Ph., LL. B., attorney-at-law, Corning.
Foster, Frank McMillan, 1894, M. E. in EE., with John N. Poage, Cincinnati, manufacturer water columns and valves.
Foster, Israel Moore, 1898, LL. B., Athens.
Foulk, Charles William, 1894, B. A., assistant professor Chemistry, State University.
Fowler, Harry R., 1894, M. E. in EE., Toledo, electrical contractor.
Fox, Charles P., 1890, B. Agr., 1895, M. Agr., Diamond Rubber Co., Akron, O.
Fox, Frederick Hugh, 1896, B. Ph., McConnellsville.
Fox, John Herbert, 1897, M. E., Cleveland, Brown Hoisting Machine Co., mechanical engineer.
Fox, Ross G., 1900, B. Ph., Columbus, 983 N. High street.
Frame, Rollo St. Clair, 1901, C. E., P., C., C. & St. L., Logansport, Ind.
Francis, Edward, 1894, B. Sc., M. D. (Ohio Medical College), assistant surgeon U. S. Marine Hospital, Washington, D. C.
Francis, Mark, 1887, D. V. M., College Station, Brazos Co., Tex., professor of Veterinary Medicine, Agricultural and Mechanical College.
Frankenberg, George Theodore, 1902, M. E., Chicago, Ill.
Frankenberg, John Theodore, 1899, M. E. in EE., Columbus, Ohio Publishing Co.
Fravel, George B., 1888, M. E., assistant master mechanic Pennsylvania Lines, Columbus, O.
Frayer, Lee Ambrose, 1896, M. E., Columbus, Frayer & Miller motor cycles.
Frechtling, Arthur George Richter, 1901, M. E., Union Pacific Ry, Cheyenne, Wyoming.
Freeman, Stanton Sholes, 1898, E. M., superintendent St. Carbon Iron and Steel Co., Parryville, Pa.
French, Thomas Ewing, 1895, M. E., Columbus, associate professor of drawing, State University, 1458 Worthington street.
Fritchle, Oliver Parker, 1896, B. Sc., Mt. Hope.
Frost, George W., 1900, M. E., Columbus, assistant in Mechanical Engineering, Ohio State University.

* Dead.

Fullmer, Edward L., 1897, B. Sc., 1898, M. Sc., Mitchell, S. D., University of South Dakota, professor of sciences.
Fullerton, Charles Haywood, 1898, B. Ph., Wheelersburg.
Funk Roy William, 1902, B. Sc., Chesterhill, O.

G.

Gains, Charles E., 1889, B. Ph., London, physician.
Galbraithe, John Howard, 1883, B. Ph., Columbus, journalist, 1087 Oak street.
Gale Cora C., 1893, B. Ph., Columbus, Oak street, near Grant.
Gale, Franklin Henry, 1893, LL. M. (LL. B., University of Michigan), Columbus, 324 Oak street.
Gallen, William Francis, 1897, M. E., Columbus, Case Manufacturing Co.
Game, Reed Haskell, 1896, B. Ph., 1899, LL. B., Columbus.
Gamper, Hedwig E., 1900, B. Ph., Columbus.
Gamper, Herman, 1899, M. E., Electrical Engineer O. S. & S. O. Home, Xenia, O.
Gauch, James Orlando, 1902, B. A., West Manchester, O.
Gayman, Charles W., 1900, B. Ph., Van Wert, Principal of the High School.
Garber, Alberta D., 1889, B. Ph., A. M.
Garber, John Murray, 1897, C. E., draftsman, Mt. Vernon Bridge Co., Mt. Vernon.
Garber, Levi L., 1898, B. A., Belleville.
Garst, William Augustus, A. B. (Otterbein University and Harvard University), 1898, LL. B., Westerville.
Gee, Eugene C., 1897, M. E. in EE., Bell Telephone Co., Phoenix, Arizona.
Gehrkens, Edward Frederick, 1894, M. E. in EE., Schenectady, N. Y., with General Electric Co.
Geissinger, James Allen, 1895, B. A., Pastor Centenary M. E. Church, Ripley, Ohio.
Genheimer, Eli Thomas, 1896, B. Ph.
Genheimer, William F., 1897, LL. B., Portsmouth, attorney.
Gibbs, George C., 1893, B. A., Columbus, with Green, Joyce & Co.
Given, James Byron, 1896, M. E. in EE., Western Electric Co., Chicago, Ill.
Givens, Newton Edgar, A. B., 1896, LL. B., Waverly.
Glover, Sioux, 1882, B. Sc. (Mrs. Horton), Errid, Pa.
Goddard, Loring Hapgood, 1892, C. E., farmer. Manora, O.
Good, Paul Revere, 1899, B. A., 1900, M. A., Westerville.
Goodell, Ralph Spencer, 1892, C. E., Mt. Vernon, assistant engineer, Mt. Vernon Bridge Co.
Goodman, Joseph Clarence, 1896, LL. M., Columbus, 375 East Town street.
Goodman, Sylvester Jacob, 1896, G. Ph., Philadelphia, Pa., student of Medicine, W. & J., Medical College.
Gordon, Adelaide Cummins, 1896, B. Ph.
Gordon, Sarah Bryarly, 1902, B. Ph., St. Mary's, O.
Graham, Emery Eugene, 1898, M. E. in EE., draftsman, Wellman-Seaver-Morgan Engineering Co., Cleveland, O.
Graham, Reuben Jacob, 1901, B. Ph., teacher in High School, Chillicothe, O.
Grandle, Frank Albert, 1891, G. Ph., Centerburg, pharmacist.
Grate, Charles Artemis, 1898, M. E., Aultman Co., Canton, O.
Graves, William L., 1893, B. A., 1897, M. A., assistant professor in Rhetoric, State University.
Gray, Genevieve, 1898, B. Ph. (Mrs. Levi Rawson), Sistersville, W. Va.

Gray, James Collam, 1892, LL. B., 1893, LL. M., Pittsburg, Pa., attorney P. R. Ry.
Graven, D. Homer (A. B., Ohio Normal University), 1900, LL. B., Nashville.
Green, Charles C., 1885, B. Sc., M. D., Beaver City, Neb., physician.
Green, Jerome Joseph, 1893, M. E. in EE., Notre Dame, Ind., Notre Dame University, professor of Physics and Elec. Engineering.
Green, Joseph Faust, 1899, M. E. in EE., Moline, Ill., electrical engineer, Moline Electric Elevator Co.
Green, Robert Lee, 1892, G. Ph., Somerset.
Greener, Gussie Howe, 1901, B. Ph., Columbus.
Gregg, Frank B., 1889, B. Ph., M. D.
Gregory, Hiram D., 1880, E. M., attorney-at-law, Covington, Ky.
Griffin, Mark H., 1897, M. E. in EE., Toledo, O., electrical engineer Toledo and Indiana Ry. Co.
Griffin, Theodore L., 1889, B. Sc., M. Sc., Columbus, chemist, 760 Mt. Vernon avenue.
Griffith, David Mathias, 1896, LL. B., Kecksburg, Pa.
Griffith, Wellington John, 1892, LL. B., Tiffin.
Griffiths, Benjamin Lincoln, 1898, LL. B., Vaughnsville.
Grimsley, George Perry, 1890, B. A., 1891, M. A. (Ph. D., Johns Hopkins University, 1894), Topeka, Kan., professor Natural History, Washburn College.
Griswold, Lawrence William, 1892, B. A., 217 W. Twelfth street, New York City.
Groff, Orsylla Ann, 1894, G. Ph., North High street, Columbus, pharmacist.
Groff, Warren Noble, 1896, B. A., 1899, LL. B., Tiffin.
Goves, John Wesley, 1898, C. E., mining engineer for Boomer Coal Co., Boomer, W. Va.
Gruen, Francis William, 1899, B. Ph., 1899, LL. B.
Guerin, Martha, 1896, B. Ph., Columbus.
Gugle, George Linville, 1896, LL. B., Columbus, attorney.
Gugle, Marie, 1897, B. A., Alexandria, Ind., teacher.
Guittard, Virgil, 1894, B. Sc., New Bedford.
Guitteau, William B., 1897, B. Ph., fellow in Political and Social Science, Cornell University, Ithaca, N. Y.
Guss, Sherman Hamlin, 1892, B. A., Clarksburg, W. Va., principal of the colored schools.

H.

Haas, Frank, 1895, C. E., 1896, E. M., chemist, Fairmount Coal Co., Fairmount, W. Va.
Hagler, Howard, 1889, B. Sc., Washington C. H., farmer.
Haigler, Charles Edmund, 1898, B. Sc., teacher Central High School, Columbus, Ohio.
Hale, Frederick James, 1898, M. E., 1900, M. Sc., Westinghouse Machine Co., gas engine department, Pittsburg, Pa.
Hall, Harry R., 1889, E. M., Supt. Blast Furnace, Lake Superior Power Co., Sault St. Marie, Ontario, Canada.
Halterman, Oscar Elmore, 1895, LL. B., B. S. (National Normal University).
Hambleton, Ethel Ada, 1901, B. Ph., Columbus.
Hamilton, Charles R., 1893, B. A., Zanesville, Dun's Commercial Agency.
Hamilton, Frank Alexander, 1895, D. V. M., Dubois, Pa., veterinary surgeon.
Hammond, Bessie B., 1897, B. Ph., Columbus, 443 Mt. Vernon avenue.
Hammond, Harry J., 1900, D. V. M.
Hammond, John Miller, 1902, C. E. Illinois Central Ry., Chicago, Ill.

Hammond, Rose Lyttle, 1896, B. Ph., Columbus, teacher, 90 North Twenty-second street.
Hance, Harry Thomas, 1901, B. Sc. (Chem.), Columbus, Ohio, Coffee and Spice Co.
Hancock, Winfield Scott (A. B., Marietta), 1900, LL. B., Marietta.
Hancock, David R., 1889., G. Ph., M. D., Columbus, physician.
Haney, Thomas Carlyle, 1894, G. Ph., Columbus, pharmacist, corner Schiller and Third streets.
Hannum, William Hamilton, 1897, B. A., India, missionary.
Hapgood, Eugene Palmer, 1902, B. Sc., Columbus, O.
Harbage, Arnett, 1893, D. V. M., West Jefferson, farmer.
Harkins, Robert R., 1900, M. E., instructor in mechanical engineering, Purdue University, Lafayette, Ind.
Harlor, John David, 1895, B. A., Columbus, teacher in East High School.
Harper, Ellahue A. (B. A., Ohio Wesleyan University), 1900, LL. B.
Harper, Merritt, 1901, B. Sc. (Agr.), 1007 Springfield St., Urbana, Ill., graduate student, University of Illinois.
Harris, Charles Pearl, 1899, B. Ph., West Liberty.
Harris, Frank Laverne, 1894, LL. B. (Ph. B., Tri-State Normal University), Payne.
Harris, Walter Conger, 1893, B. Sc., New York, with Art Department of Herald, 104 West 114th St.
Harrison, Warner, 1892, LL. B., East Town street, Columbus, attorney and solicitor C., A. & C. Railway.
Harrison, William Henry, 1885, C. E., engineer Sierro De Pasco Ry., Oroya, Peru.
Harrold, Ernst Ellwood, 1895, G. Ph., dispenser chemical store-room, State University.
Harrop, Carl Boileau, 1902, E. M., Columbus, O.
Harrop, Herbert Bailey, 1898, B. Sc., Columbus, 1323 Forsythe avenue.
Hartford Martha Dudley, 1902, B. Ph., Atlanta, Ga.
Hartsough, William H., Jr., 1898, B. Ph., Columbus, 1356 Hunter avenue.
Hartwell, Arthur, 1888, M. E., sales manager Westinghouse E. & M. Co., Pittsburg, Pa.
Hartwick, Louis M., 1897, M. E., master mechanic of blast furnace, Pueblo, Colo.
Harvey, Arlington Corylle, 1896, B. Ph., 1897, M. A., 1899, LL. B., Columbus, 145 King avenue.
Harvey, Emery Wayland, 1896, B. Ph., 253 W. 109th street, New York City, Milton Bradley Co.
Harvey, Florence Danford, 1898, B. Ph. (Mrs. Rogers), Columbus.
Harvey, Sherman Lee, 1896, G. Ph., Columbus, druggist.
Harward, Arthur B., 1900, B. A., Columbus.
Hassler, Robert Hanich, 1892, M. E. in EE., engineer International Motor Car Co., Indianapolis, Ind.
Hastings, Edwin George, 1898, B. Sc., Austinburg.
Hauk, Will Comrie, 1901, B. A., South Charleston.
Hayden, Cassius Clay, 1901, B. Sc. (Agr.), Fort Wayne, Ind., operator Sanitary Milk Plant.
Hayes, Seth, 1892, B. Sc., Fremont, science teacher of High School.
Hayman, William C., 1900, M. E. in EE., testing department General Electric Co., Schnectady, N. Y.
Hayward, George E., 1893, C. E., roadmaster C. & St. P., M. & O. R'y, Mankato, Minn

Hazelton, Bird, 1898, B. Ph., New Straitsville.
Hazlett, Robert, Jr., 1887, C. E., Wheeling, W. Va., consulting civil engineer, county engineer and chief engineer N. O. U. Electric R'y.
Heacock, William Preston, 1898, LL. B., Cardington.
Heath, Arthur T., 1887, G. Ph., analytic chemist, consulting engineer and contractor, Ashtabula, O.
Hebble, Charles Roy, 1896, M. E. in EE.
Hedges, Herry, 1888, B. A.
Heller Albert Henry, 1890, C. E., professor civil engineering, Ohio State University, Columbus, O.
Henderson, Adelbert Andrew, 1898, C. E., transit man, county engineer, Pittsburg, Pa.
Henretta, Charles Michael, 1896, E. M., mining engineer, Canadian Pacific Railroad, Fernic, B. C.
Hensel, Donald Dean, 1902, B. Ph., Eaton, O.
Herbert, Charles T., 1897, LL. B., Columbia, South America.
Herms, Edith S., 1898, B. Ph., Portsmouth.
Herrick, Louise, 1893, B. A. (Mrs. Harry Abbott), Columbus, 1454 Highland St.
Herrick Sara Ethel, 1902, B. Ph., Columbus, O.
Hershey, Harry Hartman (A. B., Mt. Union College), 1900, LL. B., East Greenville.
Hertner, John H., 1899, M. E. in EE., Hertner Electric Co., Cleveland, O.
Hess, Florence Louise, 1895, B. Ph., Columbus.
Hewitt, Strafford Reaves, 1898, M. E. in EE., engineer for Central Coal and Iron Co., Central City, Ky.
Hiatt, William Arthur, 1895, B. Ph., New York City, teacher in Stevens School, Hoboken, N. J.
Hicks, Nellie Rogers, 1902, B. A., Centerburg, O.
Higbee, Charles E., 1883, B. Sc.
High, Odessa, 1896, B. A., West Jefferson.
Hill, Frank E., 1886, B. Sc., M. D., Muncie, Ind.
Hill, I. T., Reynolds, 1896, B. Sc. (H. & F.), Washington, D. C., student assistant div. Forestry.
Hill Mamie Faye, 1902, B. Sc., Columbus, O.
Hine, James S., 1893, B. Sc., Columbus, assistant professor of Entomology, State University.
Hine, Lucius A., 1888, E. M., 140 50th street, Chicago, Ill., President and Treasurer Hine-Watt Manufacturing Co.
Hipple, John Merton, 1898, M. E. in EE., Westinghouse E. & M. Co., Wilkinsburg, Pa.
Hirsch, Gustav, 1897, M. E. in EE., Gen'l Supt. Citizens' Telephone Co., Detroit, Mich.
Hirsch, Rudolph, 1901, B. Sc., Columbus, Instructor Ohio State University.
Hirst, Anna Brewster, B. A. (Antioch College), 1900, M. A., Yellow Springs.
Hitch, James Franklin, 1902, C. E., Illinois Central Ry., Chicago, Ill.
Hoel, Sarah Elizabeth, 1893, B. Sc. (Mrs. W. M. Mills), North Tonawanda, N. Y.
Hoffman, Arthur Sullivant, 1897, B. A., Troy.
Hoffman, Hattie DeLong, 1900, B. Ph., Teacher Public Schools, Mansfield, Ohio.
Holbrook, George Frederick, 1902, E. M., Bucyrus, Ohio.
Holcomb, Harry John, 1901, B. A., Columbus.
Homan, Frank, 1895, C. E., Supt. Southern Slate Co., Chilhowee, Tenn.
Hood, Sherman, 1894, B. Sc., Meander, gardner.

Hoover, Frederic Roland, 1899, B. Ph., Columbus.
Hopkins, Bertha Marie, 1902, B. Ph., teacher in Marysville Public Schools.
Hopkins, Charles Delnow, 1893, LL. B. (B. A., Ohio Wesleyan University), Athens.
Hopkins, Clara Mae, 1902, B. Ph., Marysville, O.
Hopkins, Edith Estelle, 1902, B. Ph., teacher Milford Center, O.
Horton, Henry Pomeroy, 1889, B. Ph.
Hough, Benson Walker, 1899, LL. B., Delaware.
Houghton, Henry Spencer, 1901, B. Ph., Cincinnati.
Houle, Frank Gaydon, A. B. A. M. (Western Reserve), LL. B., Bellevue, O.
Houseman, Ruth U., 1897, B. Ph., Painesville (Mrs. R. Belknap).
Houston, Anna Christine, 1892, B. Ph., 1895, M. A., Marysville.
Hovey, Clark Samuel, B. A. (Buchtell College), 1898, LL. B.
Howald, Ferdinand, 1878, B. Sc., 1881, E. M., Rush Run, W. Va., coal operator.
Howard, A. B., 1883, B. Ph., Jackson, Miss., clergyman.
*Howard, Anna F., 1900, B. Ph., died January, 1901.
Howard, Curtis C., 1878, B. Sc., M. Sc., 115 Jefferson avenue, Columbus, professor of Chemistry in Starling Medical College.
Howard, Fanny Fern, 1896, B. A. (Mrs. McDonald Mitchell), Charleston, Ill.
Howard, Edward Davenport, 1894, LL. B., 1896, LL. M., Columbus, attorney.
Howard, John Wilmot, 1895, B. Sc., Columbus, assistant secretary, Board of Trade.
Howells, E. S., 1884, E. M., general manager Howells & Jones Co., Blocton, Ala.
Howels, Thomas J., 1897, E. M., chemist Pocahontas Coal Field for National Steel Co., Bluefield, W. Va.
Hubbard, Ralph Newton, 1891, B. Sc., Columbus, Columbus Machine Co.
Hughes, Raymond Mollyneaux, A. B. (Miami University), 1897, M. Sc., Miami University, professor of Chemistry.
Huddleson, Don Carlos, 1897, G. Ph., Columbus, instructor in Gymnasium, State University.
Huddleson, Frank Newton, 1902, E. M., Columbus, O.
Hudson, Clara Putnam, 1902, B. Ph., Middleport, O.
Huffman, Lillian Stuart, 1899, B. Ph., Columbus, 389 East Rich St.
Huggins, Burch Delaplaine, 1899, B. Ph., attorney, Columbus.
Hull, Mary Louise, 1894, B. A. (Mrs. C. H. Farber), Columbus, 392 West Seventh avenue.
Hull, Walter Austin, 1902, E. M., Zanesville, O.
Humphrey, J. Scott, 1879, B. Sc., Findlay, civil engineer.
Humphreys, Leona, 1895, B. A.
Hungelmann, Arthur, 1902, B. Sc., Columbus, O.
Hunt, Mary Fulton, 1901, B. Ph., Columbus, E. Broad street.
Hunt, William Franklin, 1887, M. E. (LL. B., 1895, LL. M., 1896, University of Minnesota), attorney-at-law, New York Life Building, St. Paul, Minn.
Hunter, Joseph Symmes, 1901, B. A., Hamilton.
Hunter, Madone C., 1900, M. E. in EE., electrical engineer Kilbourne & Jacobs Mfg. Co.
Huntington, Arthur, 1899, M. E., Evanston, Ill., Supt. Evanston Electric Illuminating Co.
Huntington, Charles Clifford, 1902, B. Ph., Yellow Springs, O.
Huston, Charles H., 1897, LL. B. (B. S., Tri-State College, Ind.), Mansfield.
Hyde, Wilby Grimes, 1887, B. A. (LL. B., Cincinnati), Chillicothe, attorney-at-law.
Hyle, Charles A., 1896, M. E. in EE., U. S. Weather Bureau, San Francisco, Cal.

* Dead.

I.

Imes, Marion, 1899, B. Sc. (Agr.), 1901, D. V. M., Chicago, Ill., meat inspector (U. S. government office).
Ingram, Imogene, 1897, B. Ph., Columbus.
Innis, Lyman H., 1893, B. A., 1895, LL. B., Columbus, attorney, 323½ South High.
Ireland, Guy Llewellyn, 1895, M. E.
Irvin, Chadwick H., 1897, M. E., Sharon, Pa., Sharon Steel Co., 20 Fourth street.
Irwin, Albert Newton, 1901, D. V. M., St. Joseph, Mo.

J.

Jackson, Frank Pierce, 1892, LL. B., 1893, LL. M., Columbus, attorney, 82 South Washington avenue.
James, Florence May, 1896, B. A. (Mrs. Oscar R. Flynn), Chicago, Ill., 5802 Jackson avenue.
Jaynes, Allan B., 1900, Washington, D. C., Census Department.
Jeffrey, James Fred, 1900, B. Sc., Columbus.
Jeffrey, Maud Dorothy, 1895, B. Ph., assistant in library, State University.
Jenkins, William B., 1893, C. E., Bellefontaine, draftsman Bellefontaine Bridge and Iron Co.
Jenkins, Willis H., 1894, C. E., transit man P., C., C. & St. L. R'y, Carnegie, Pa.
Jennings, Elma Fogg, 1902, B. Ph., Eaton, O.
Jennings, Irvin G., 1899, LL. B., Zanesville.
Jennings, Levi E., 1897, M. E. in EE., Eaton, O.
Johnson, Charles W., 1896, M. E. in E. E., Norwood, Cincinnati, chief draughtsman Bullock Electric Mfg. Co.
Johnson, Earle S., 1900, M. E. in EE., General Electric Co., Schnectady, N. Y.
Johnson, Herbert Lincoln R., 1892, M. E. in EE.
Johnson, Walter Alexander, 1902, M. E., Columbus, O.
Johnston, George Edward, 1892, C. E., L. & N. R. R., Louisville, Ky.
Johnston, Frederick Symmes, 1899, B. Sc. (Agr.), assistant professor of Agriculture, Perdue University.
*Jones, A. A., 1886, C. E., died May, 1894.
Jones, Arthur James, 1898, M. E. in EE., Wilkinsburg, Pa., Westinghouse Electric and Manufacturing Company.
Jones, Aaron Wesley, 1891, B. Sc., Columbus, Gardner Insurance Agency.
Jones, Alexander Houston, 1895, M. E. in EE., Cleveland, O.
Jones, Benner, 1897, LL. B., Jackson.
Jones, Daniel C., 1902, B. Ph., Jackson, O.
Jones, Daniel D., 1893, G. Ph., Gallipolis, pharmacist, Epileptic Hospital.
Jones, Hanby Raymond, B. Ph. (Otterbein University), 1901, LL. B., Westerville.
Jones, Jesse Lee, 1890, B. A., Philadelphia, Pa., chemist, William Cramp & Sons, Ship Builders.
Jones, John, 1901, B. Ph., Columbus.
Jones, Paul, 1880, B. A., Columbus, attorney-at-law.
Jones, Pearl N., 1892, M. E. in EE., engineer and salesman, Westinghouse E. & M. Co., Wilkinsburg, Pa.
Jones, Richard Thomas, 1900, B. Ph., Colnmbus, 172 Seventeenth street.

* Dead.

Jones, Smiley, 1894, E. M., Prescott, A., superintendent Empire Gold Mining and Milling Co.

Jones, William Francis, 1896, D. V. M., Cincinnati, Miami Medical College.

Judd, Horace, 1897, M. E., 1899, M. Sc., assistant professor in experimental engineering, Ohio State University.

Judkins, Clyde H., 1897, LL. B. (A. B., Scio College), Flushing.

Junk, Harry Prior, 1895, LL. B., Columbus, attorney-at-law, 387 Oak street.

K.

Kahle, James Byron, Ph. B. (Hiram College), LL. B., 1902, Tedrow, O.

Kanmacher, Samuel H., 1900, M. E. in EE., testing department General Electric Co., Schenectady, N. Y.

Kauffman, Henrietta Christine, 1901, B. Ph., Columbus, University Grounds.

Kauffman, Margaret Glenn, 1901, B. Ph., Columbus, University Grounds.

Karshner, George M., 1900, B. A., Columbus, student O. S. U. Law College.

Keagle, Anna Brown, 1895, B. Ph., Columbus, teacher North High School, 59 West Fourth avenue.

Keating, David Thatcher, 1899, B. Ph., 1902, LL. B., Columbus, 1317 East Broad street.

Keating, Harvey, 1902, B. Sc., Columbus, O.

Keffler, Frederick, 1892, M. E., 31 Nassau street, New York City.

Keifer, William White, 1886, B. A. (LL. B., Cincinnati), Springfield, attorney-at-law.

Keiser, Romeo Orpheus, 1892, B. Sc., 1896, G. Ph., '98, M. D., O. M. U., '99, M. D., Cleveland Homeopathic Medical College, physician.

Kellerman, Ivy, 1898, B. A., 1899, M. A. (Cornell University), Ithaca, N. Y., student, Cornell University.

Kellicott, William E., 1898, B. Ph., assistant in Zoology, Barnard College, New York.

Kellison, Edward Lafayette, 1897, B. Ph., 1900, LL. B., Quincy.

Kemmler, Edward A., 1888, C. E., 895 South High street, Columbus, assistant city engineer.

Kern, William Frederick, 1902, B. Sc., Bellaire, O.

Kerr, Samuel Thompson, 1894, M. E. in EE., Martins Ferry, superintendent Municipal Electric Light Plant.

Kersey, William Rufus, 1899, M. A. (B. A., Earlham College), Columbus, 433 East Town street.

Kershaw, Francis Stewart, 1891, B. Ph., Boston, Mass.

Kershaw, Samuel Charles, 1892, B. Ph., Columbus, Weisman, Lilley & Kershaw.

Kester, Fred. Edward, 1895, M. E. in EE., Columbus, assistant professor in Physics, Ohio State University.

Kettler, Frank Christian, 1901, C. E., North Works, Illinois Steel Co., Chicago, Ill.

Kiesewetter, Louis Frank, 1891, C. E. (A. B., Harvard, '92, and A. M., '93), Columbus, Cashier Ohio National Bank.

Kiler, Abdel William, 1896, G. Ph., druggist, Columbus, Eighth and High streets.

Kinder, Gordon D., 1900, B. Ph., "Pittsburg Post," Pittsburg, Pa.

Kimberley, Charles H., 1900, B. Sc., 1901, M. Sc., pharmacy, Fargo, N. D., instructor in Pharmacy, North Dakota Agricultural College.

King, Herbert Sumner, 1901, C. E., engineer Maryland Smokeless Coal Co., Belington, W. Va.

King, Robert James, 1899, B .A., 1902, LL. B., Zanesville.
King, Roy Stevenson, 1902, M. E., National Cash Register Co., Dayton, O.
Kirby, Harriet R., 1898, B. A., Columbus, teacher in North High School.
Kirk, George Barlow, 1901, B. A., teacher in High School, Mechanicsburg.
Kirker, Harry L., 1889, B. Sc., with the Westinghouse Company, Sodelee Boite 56, Havre, France.
Kiser, Katherine Daniel, 1895, B. A., Columbus, teacher in High School, 81 Miami avenue.
Klein, David, 1900, B. Ph., Columbus.
Kline, Charles H., 1897, M. E. in EE., Dayton, civil engineer with R. C. Kline, consulting engineer.
Knauss, William Henry, 1895, B. Sc., student, Starling Medical College, 1317 Dennison avenue.
Knecht, Arthur Edward, 1898, M. E., Cincinnati, O., mechanical engineer Screw and Tap Co.
Knight, Caroline E., 1900, B. Ph., Columbus.
Knight, Ruby Ray, 1895, B. Sc., Middleport.
Knight, William A., 1900, M. E., Columbus, assistant professor of Machine Shop Practice, State University.
Knopf, Eva S., 1895, B. Ph., Columbus, teacher in North High School.
Knopf, George W., 1883, B. Sc., Pittsburg, Pa., bridge builder.
Knox, Frank Stewart, Jr., 1900, E. M., resident engineer Federal Coal and Coke Co., Grays Flat, W. Va.
Kohl, Clayton Charles, 1901, B. Ph., teacher in High School, Mechanicsburg, O.
Kohr, Donald Alexis, 1898, B. Ph.
Kramer, John Franklin, B. A. (Ohio Normal University), 1902, LL. B., Butler, O.
Krauss, Bertha Katherine, 1892, B. Ph., Ottawa, 304 E. Main Cross street.
Kreiger, Charles Henry, 1887, G. Ph., Columbus, superintendent the Kauffman-Lattimer Co.
Krumm, Charles S. M., 1896, B. Ph., 1898, LL. B., Columbus, attorney, 277 South Eighteenth street.
Krumm, Herbert Zettler, 1898, B. Ph., Columbus, 975 South High street.
Krumm, Lillian Louise, 1895, B. Ph. (Mrs. Harry Rush Wilson), Columbus, 1459 Bryden Road.
Krumm, Louis Ralph, 1898, M. E. in EE., engineer Columbus Citizens' Telephone Co., Columbus, O.
Krumm Thomas Zettler, 1902, C. E., Illinois Central Ry., Chicago, Ill.
Krupp, William Emil, 1899, LL. B., Urichsville.
Kuhn, Valley Howard, 1896, M. E. in EE., Etna.
Kuhn, Harry Waldo, 1897, B. Sc., assistant professor of Mathematics, Ohio State University.

L.

Lamb, Morgan Baxter, 1901, D. V. M., Pullman, Washington, associate professor Veterinary Science and assistant state veterinarian.
Lamb, Whitney E., 1900, M. E. in EE., testing department General Electric Co., Schenectady, N. Y.
Lamme, Benjamin G., 1888, M. E., Pittsburg, Pa., assistant chief engineer, Westinghouse E. & M. Co.
Lamme, Bertha A., 1893, M. E. in EE., Pittsburg, Pa., Westinghouse E. & M. Co.
Landacre, Francis Leroy, 1895, B. A., associate professor of Zoology and Entomology, State University.

Landacre, Walter Alexander, 1891, G. Ph., 1902, B. Sc., 1408 Wesley, Columbus.
Landis, Walter Victor Titus, 1895, B. Ph., Dayton.
Lane, Quinton R., 1898, B. Ph., 1900, LL. B., attorney, Columbus.
Large, Joseph H., 1890, C. E., draftsman, Massillon Bridge Co., Massillon, O.
Laughlin, Hugh Clarence, 1890, B. A. (A. M., 1895, University of Nebraska), 1038 Union avenue, New York, teacher in Peter Cooper High School.
Lavery, William F., 1890, D. V. M., meat inspector Bureau Animal Industry, Kansas City, Mo.
Lawrence, Arthur K., 1897, G. Ph., Columbus, 69 North Seventeenth street, Pharmacist.
Laybourne, Lawrence Everette, 1902, LL. B., Springfield, O.
Layton, Roy Everett, 1895, B. A., 1897, LL. B., Wapakoneta, attorney.
Lee, Corless E., 1900, M. E. in EE., with General Electric Co., Schnectady, N. Y.
Lee, Edwin S., 1893, G. Ph., Columbus, druggist, 144 West Ninth avenue.
Lee, Robert M., 1897, M. E., draftsman General Electric Co., Schenectady, N. Y.
*Leffler, Edward Victor, 1896, G. Ph., died July 13, 1901.
Lehman, John Wesley, 1899, B. Ph., Canal Winchester.
Lemert, Helen Ora, 1894, B. A., Columbus, teacher East High School.
Lentz, Alice B., 1897, B. Ph., Lloydsville.
Lentz, Florence, 1901, B. Ph., Marysville.
Lentz, Theresa, 1893, B. Ph., Bellaire, teacher in High School.
Leonard, James Lincoln, 1893, LL. B. (B. S., Ohio Normal University), Welcome.
Leonard, Ralph Sherman, B. A., M. A. (Denison University) 1902, LL. B., Granville, O.
Lesh, John Howard, 1901, M. E., engineering department Cleveland Electric Co.
Levering, Orpheus D., 1893, M. E., foreman of tool room, Columbus Machine Co., Columbus, O.
Lewis, Charles Montgomery, 1881, B. A., Columbus, with Columbus Evening Dispatch.
Lewis, Thomas K., 1894, B. Sc., Columbus, assistant in drawing State University.
Lincoln, Paul Martyn, 1892, M. E. in EE., Westinghouse E. & M. Co., Pittsburg, Pa.
*Lindo, William C., 1896, C. E., died, 1900.
Linebaugh, Jesse J., 1899, M. E. in EE., Schenectady, N. Y., electrical engineer testing department General Electric Co.
Linson, Irvin, 1882, B. A.
Linville, Clarence P., 1900, B. Sc., 1902, M. A., Hagenbaugh, O.
Lisle, Charles H., 1900, B. Ph., Pataskala.
Lisle, Dallas Gypsi, 1899, B. Ph., Ashland Ky.
Lisle, Leslie Mae, 1899, B. Ph., Columbus.
Lisle, Mabel, 1897, B. Ph. (Mrs. Wm. Mead), King avenue, Columbus.
Logan, Lavallette Lasea, 1896, E. M., general manager Rockhill Iron and Coal Co.
Logsdon, Carey Lignori, 1899, B. Ph., Columbus.
Logsdon, Clement Jay, 1898, G. Ph., Osborne, O.
Loomis, John Cooper, 1898, LL. B., Tiffin.
Lott, Charles Milford, 1895, M. E. in EE., superintendent electric light plant, Hicksville, O.
Loveberry, Clarence, 1896, D. V. M., meat inspector Bureau Animal Industry, Minneapolis, Minn.
Lovejoy, Ellis, 1885, E. M., Union Furnace, superintendent Columbus Brick and Terra Cotta Co.

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* Dead.

Lovejoy, Jesse R., 1884, B. Sc., Schenectady, N. Y., with General Electric Co.
Luce, George Ernest, 1897, LL. B. (A. B., Ohio Wesleyan University), Columbus, 95 Hamilton avenue.
Luse, Clara E., 1897, B. Ph. (Mrs. Herbert Scott), Marietta.
Lusk, William Vinton, 1893, D. V. M., veterinary surgeon U. S. Cavalry, Washington, D. C.
Lydenberg, Walter B., 1898, B. A., Dayton.
Lynas, Caroline, 1898, B. A., Columbus, 109 West Gay street.
Lynas, Charles E., 1898, B. A., Columbus, 194 Hamilton avenue.
Lyon, Arthur H., 1900, M. E., chief draughtsman New York Blower Co.

M.

Maag, Benjamin Franklin, 1899, M. Sc.(B. Ph., Wooster University), Mt. Eaton.
Macguire, Charles White, 1895, G. Ph., '97, M. D., Toledo Medical College, Toledo, Ohio.
Machwart, Washington J., B. Sc. (Muskingum College), 1900, M. A., Mt. Eaton.
Mackey, Ure LaVerne, 1893, M. E. in EE. (B. A., Wooster University).
Magly, Robert O., 1897, G. Ph., chemist Miller-Wagoner-Fiesner Co., Columbus, O.
Magruder, Leonard Anthony, 1895, B. Ph., 1896, LL. M.
Maier, John Valentine, 1895, LL. B. (B. S., Northern Indiana Normal University).
Malone, William Ruskin, 1885, B. A., New York City, with New York Life Insurance Co., room 1917, Park Row Building.
Manecke, Gilbert, 1897, LL. B., Fostoria.
Manley, Rush Emmett, 1894, M. E. in EE., Chief Inspector Central Union Telephone Co., Columbus.
Mann, Wilber Edwin, 1899, B. Ph., 1900, M. A., Columbus, 1420 Wesley avenue.
Marchworth, Otto Stanley, 1901, B. Sc. (Chem.), Local Inspector New York Rapid Transit Board of Commissioners, New York.
Marple, Charles Allen, 1885, B. Sc., Louisville, Ky., teacher of Science, Male High School.
Marquard, Frank Fred, B. L., 1896, C. E., Sharon, Pa., chemist Sharon Steel Co.
Marshall, George Sidney, 1894, B. Ph., 1897, LL. B., Columbus, attorney, Second Assistant Director of Law, 1566 Neil avenue.
Marshall, Ida, 1902, B. Sc., Hemlock, Ohio.
Marshall, Willard B., 1900, M. E. in EE.
Martell, Leonard Roland, 1898, B. A., Columbus, 1665 South High street.
Martin, Edwin Dunlevy, 1891, B. Ph.
Martin, George, 1897, M. E. in EE., wire chief Central Union Telephone Co., Youngstown, O.
Martin, John Douglas, Jr., 1901, M. E., Dennison, P., C., C. & St. L. Shops.
Martin, Percy, 1892, M. E. in EE., Genl. Mngr. Daimler Motor Co., Coventry, England.
Martz, Velorus, 1901, B. A., Mt. Sterling.
Marvin, Charles Frederick, 1883, M. E., Washington, D. C., 1404 Benney street., U. S. Weather Bureau.
Mason, George F., 1890, G. Ph., Milwaukee, Wis., druggist.
Masters, George Albert, 1886, C. E., Asst. Bridge Engineer A. T. & S. F. Ry., Topeka, Kansas.
Mathers, John Harrison, 1895, B. Ph., Conover.
Mathias, Frederick W., 1893, B. Sc., Toledo, teacher High School.

Matson, George H., 1892, G. Ph., 169 Hamilton avenue, Columbus, professor of Pharmacy, Ohio Medical University.

Matson, William Edgar, 1896, M. E. in EE., Lynn, Mass., production department General Electric Co.

Matthews, Max Moses, 1902, B. Ph., Vinton, Ohio.

Mauer, George Clifford, 1892, D. V. M., Oak Harbor, veterinarian.

Mays, James Wesley, 1897, B. Ph., Columbus.

McAllen, William Johnson, 1894, C. E., civil engineer Illinois Steel Co., Chicago, Ill.

McAllister, Earl Saddler, B. Ph., 1902, Columbus.

McCall, Arthur Gillett, 1900, B. Sc. (Agr.), field assistant Bureau of Soils, U. S. Dept. Agr., Washington D. C.

McCallum, Raymond, 1900, B. Ph., Dayton.

McCarter, Edward Bancroft, 1892, B. A., 1894, LL. B., Columbus, attorney, 737 Bryden Road.

McCarter, Flora, 1897, B. A. (Mrs. George McAuley), Columbus, 1216 Bryden Road.

McCarter, Robert Dale, Jr., 1895, M. E. in EE., 110 Cannon street, London, Eng., reperesenting General Electric Co.

McCleary, Clayton A. (Ph. B. Franklin College) 1900, LL. B., Lorain.

McClelland, Chalmer Kirk, 1898, B. Sc. (Agr.), Ithaca, N. Y. Post graduate Cornell University.

McClelland, Robert Lyle, 1901, D. V. M., Sioux City, Iowa, meat inspector Bureau Animal Industry.

McClure, Robert E., 1900, LL. B., Dayton.

McCormick, J. H., 1880, M. E., mechanical engineer, Columbus.

McCormick, William Francis, 1896, M. E., drafstman C. & N. W. Ry., Chicago, Ill.

McCullough, George Elmer, 1891, B. Sc.

McDonald, Joseph Sylvester, 1901, B. Ph., Rendville.

McDowell, John Andrew, 1882, B. Sc., 949 Neil avenue, Columbus, cement engineer.

McFadden, John Franklin, 1878, B. A., Columbus, attorney-at-law, 92 North Twenty-first street.

McFarland, Horace Maley, 1902, E. M., Columbus.

McGregor, James Howard, 1894, B. Sc., New York, assistant in Zoology, Columbia University.

McGrew, John Alexander, 1895, C. E., M. of W., Pennsylvania Railroad Co., Logansport, Ind.

McGuffey, Francis Hoyt, 1894, M. E. in EE., clerk Railway Mail Service, Columbus.

McIntire, Alfred Heber, 1898, M. E. in EE., 1900, M. E., Schenectady, N. Y., General Electric Co.

McIntosh, Roscoe Everett, 1902, M. E., Westinghouse E. & M. Co., Pittsburg, Pa.

McKeon, Robert Dale, 1902, C. E., P., C., C. & St. L. Ry., Logansport, Ind.

McKinney, Frank Cowen, 1901, B. A., 1902, M. A., Columbus.

McLaughlin, Annis, 1897, B. Ph. (Mrs. Henry Miller), Portsmouth, Ohio.

McLaughlin, James Audley, 1895, LL. B. (B. A., Monmouth College).

*McMakin, Amasa Brown, 1879, B. Sc., died May 22, 1891.

McNary, George Bull, Jr., 1896, M. E. in EE., Toledo, traveling salesman, Bissell & Co.

McPherson, William, 1887, B. Sc., 1891, M. Sc., 1895, D. Sc., 1889, Ph. D., University of Chicago, Columbus, State University, professor of Chemistry.

Mead, Clinton V., 1884, B. Ph., Denver, Col., attorney-at-law.

Mead, Rollo Nooman, 1895, D. V. M., meat inspector Bureau Animal Industry, St. Paul, Minn.

Meade, Caroline Annis, 1902, B. Ph., Columbus, Ohio.

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* Dead.

Mebs, George H., 1897, G. Ph., Columbus, Pharmacist, Columbus State Hospital.
Meek, Charles Wesley, 1894, LL. B., Toledo.
Meek, Edward Duncan, 1896, B. A., 1899, M. A., Glencoe.
Meek, William W., 1899, B. Ph., Monroe avenue, Columbus, J. W. Meek & Co.
Melick, Neil Albert, 1901, C. E., draftsman chief engineer's office N. Y. C. & H. R. Ry.
Mendenhall, Maurice H., 1893, D. V. M., West Elkton.
Menough, Arthur George, 1894, E. M., assayer and chemist, Wellsville, Ohio.
Mercer, Frank Emmet, 1896, M. E. in EE., Risdon Iron and Locomotive Works, San Francisco, Cal.
Merrill, Alice Louise, 1893, B. A., teacher, 318 W. 61st Place, Englewood, Ill.
Merrill, Charles Wesley, A. B. (Denison University), 1898, LL. B., 326-330 The Nasby, Toledo, attorney.
Merrill, Everett Martin, 1902, C. E., Huntington, W. Va.
Mershon, Ralph D., 1890, M. E., consulting engineer, 120 Broadway, New York City.
Mesloh, Charles W., 1889, B. A., 1895, M. A., assistant professor of German, State University.
*Metters, Allen, 1896, B. A., died January 22, 1898.
Metzger, Edward H., 1897, G. Ph., Columbus, assistant pharmacist, State Epileptic Hospital.
Mickey, Blanche D., 1898, B. Ph., Shelby, teacher.
Middleswart, Clarence Coulter, A. B. (Marietta College), 1898, LL. B., Constitution.
Middleton, Ambrose, 1895, G. Ph., Malta, pharmacist.
Miller, Albert Arthur, 1902, C. E., Zanesville, Ohio.
Miller, Carl James, 1898, B. Sc. (Agr.), Franklin, stock farmer.
Miller, Charles C., 1883, B. A., Lima, superintendent schools.
Miller, Cornelia Williams, 1902, B. Ph., Columbus, Ohio.
Miller, Daniel Elmer, 1890, G. Ph., Dayton, druggist.
Miller, Frank Case, 1893, C. E., Springfield, Ill., engineer maintenance of way, Chicago and Alton R. R.
Miller, Frederick A., 1901, B. Ph., Columbus.
Miller, Gretchen P., 1900, B. Ph., Columbus, 1024 Highland street.
Miller, Harry Franklin, 1889, M. E., Westinghouse Co., Cleveland.
Miller, Henry P., 1897, D. V. M., Sunbury.
Miller, Merritt Finley, 1900, B. Sc. (Agr.), instructor, State University.
Miller, Ralph Charles, 1901, C. E., maintenance of way department, P., C., C. & St. L. Ry., Pittsburg, Pa.
Miller, Walter McNab, B. Sc., 1885 (M. D., 1897, San Francisco Medical College, student Leipsig, Germany), Reno, Nev., professor of Anatomy and Physiology, State University.
*Milligan, James Porter, 1886, B. A., died February, 1899.
Mills, Glendora, 1902, B. Ph., Marysville, Ohio.
Mills, Helen, 1902, B. Ph., Gallipolis, Ohio.
Mills, William C., 1898, B. Sc. (H. & F.), M. Sc., 1902, Columbus, curator Archæological collection, State University.
Milne, Alexander, B. D. (Yale University), 1898, M. A., Duluth, Minn., pastor Pilgrim Congregational Church.
Minshall, Thaddeus Ellis, 1901, LL. B., Columbus, attorney.
Mitzenberg, Allena May, 1901, B. Ph., Columbus.
Mix, Edward W., 1888., B. Sc., Paris, France, superintendent "Le Societi des Establishments."
Mix, Melvin Noble, 1895, B. Ph., New York, The World, journalist.

* Dead.

Mock, George Herbert, 1891, B. Sc., Ohio State Savings Bank, Columbus.
Mock, Marcia Inez, 1901, B. Ph., Columbus.
Montgomery, Howard, 1896, B. Ph.
Moodie, Alice Haynes, 1890, B. A. (Mrs. Arthur Hartwell), Pittsburg, Pa.
Moon, Victor C., 1900, B. Ph., Powell, Ohio.
Mooney, Charles Napoleon, 1900, B. Sc. (Agr.), field assistant Bureau of Soils, U. S. Dept. Agr., Washington, D. C.
Mooney, Daniel Francis, 1894, LL. B., St. Mary's.
Moore, Clarence Lemuel Elisha, 1901, B. Sc., Washington C. H.
Moore, Edgar Howard, 1900, B. Sc., Columbus.
Moore, Henry Curtis, 1897, B. Sc., LL. B., 1901, Washington C. H.
Moore, Virgil Owen, 1895, B. Sc., M. D., Toledo, 1103 Starr avenue, physician.
Morgan, Roy, 1902, B. Ph., Greenland, Ohio.
Morhart, Katherine Elizabeth, 1893, B. Ph., Pomeroy.
Morrey, Annie Eliza, 1896, B. A., Chester Hill.
Morrey, Charles B., 1890, B. A., 1896, M. D., Columbus, assistant professor Physiology, State University.
Morrey, William T., 1888, B. A., New York City, teacher Physiography, Peter Cooper High School.
Morris, Ingle H., 1900, LL. B., Columbus.
Morris, Clyde T., 1898, C. E., office engineer, Puget Sound Bridge and Dredging Co., Seattle, Wash.
Morris, Robert Hamilton, 1901, E. M., engineer, Modoc Coal and Mining Co., Modoc, Ohio.
Morris, William Blaine, 1902, M. E., Massillon, Ohio.
Morrison, M. Frank, 1879, B. A., (Mrs. S. H. Short), London, England.
Morrison, Robert O., 1893, C. E., New Castle, Pa., assistant on engineer corps Erie and Ashtabula division of Pennsylvania Lines west of Pittsburg.
Morrow, Charles James, 1900, D. V. M., meat inspector Bureau Animal Industry, St. Joseph, Mo.
Morton, George L., 1884, M. E. (LL. B., National Law School), chief examiner. patent office, Washington, D. C., room 256.
Moses, Martha Allston, 1891, B. Ph., 1111 Hinman avenue, Evanston, Ill., bookkeeper.
Moss, Blanche, 1898, B. A., Columbus, Bradstreet's Mercantile Agency.
Moss, William, 1898, G. Ph., Cambridge, Ohio, Pharmacist.
Moyer, Henry E., 1893, B. Sc., Youngstown, chemist, Youngstown Steel Co.
Muirie, Frederick John, 1902, B. A., Youngstown, Ohio.
Mull, Bert LaForrest, 1898, LL. B., Columbus, 114 Herman street.
Mullay, Annie, 1887, B. Ph., Chicago, teacher.
Mumma, Marion Wilson, 1901, B. Sc., Dayton.
Mundhenk, Fred, 1896, B. Ph., Columbus, life insurance agent, 233 North Eleventh avenue. *
Mundhenk, Herbert C., 1889, B. Ph., Brookville.
Mundhenk, Ruth, 1899, B. Ph., Dayton.
Munn, Mortimer Adam, 1894, C. E., Cleveland, civil engineer E. P. Roberts Co.
Munson, Theodore, 1898, B. Sc., Zanesville.
Murdock, George Washington, 1901, B. Ph., Durango, Colo.
Murray, Claude R., 1895, B. A., Middleport, principal of High School.
Murray, Frank Erskine, 1892, D. V. M., meat inspector, Omaha, Neb.
Myers, Albert B., 1900, E. M., Asst. engineer for Compania Metallurgica Mexicana, San Luis Potosi, Mexico.

* Dead.

Myers, Joseph Simmons, 1887, B. A., Pittsburg, editor Pittsburg Post.
Myers, Ord, 1895, M. E. in EE., electrical engineer Metropolitan St. Ry. Co., New York.
Myers, Roy V., 1893, C.E., Dayton, Tenn., Dayton Coal and Iron Co., Ltd.
Myers, Uriah H., 1887, E. M., Pittsburg, Pa., printer and stationer.

N

Nagel, William G., 1895, M. E. in EE., Toledo, president and manager W. G. Nagel & Co., electrical supplies.
Nauss, Ralph Welty, 1901, B. Sc. (Chem.), graduate student, State University.
Nash, Owen Arthur, B. A., M. A. (Denison University), LL. B., 1902, Newark, Ohio.
Nash, Simon, 1901, B. A., Columbus.
Needham, Harry J., 1900, M. E., special apprentice Pennsylvania R. R., Indianapolis, Ind.
Needels, Ada Ruckle, 1901, B. Sc., Groveport.
Needles, Mana R., 1890, B. Ph. (Mrs. Kilpatrick), Owosso, Mich.
Neill, Nelson Prentice, 1901, B. Sc. (Agr.), Washington, D. C., field assistant U. S. Soil Survey.
Nettleton, Arthur Warren, 1898, B. Sc. (Agr.), Medina.
Newton, Henry S., 1889, B. Sc., Syracuse, N. Y., general manager Syracuse, Lakeside and Baldwinsville Ry.
Newton, Samuel Donald, 1895, C. E., roadmaster Southern Ry., Knoxville, Tenn.
Nichol, Gertrude Bell, 1899, B. Ph. (Mrs. Addison), Columbus.
Nichols, Ada May, 1902, B. Ph., Chillicothe, Ohio.
Nicholson, Charles M., 1900, M. E. in EE., Bullock Electrical Mnfg. Co., Cincinnati, Ohio.
Nicola, Benjamin Di., 1900, LL. B., Barnhill.
Nida, William Lewis, 1901, B. Ph., Stryker.
Nidy, Herbert C., 1901, M. E. in EE., Supt. electrical Dept. and instructor in machine shop, Miller Manual Labor School, Miller's School, Va.
Niewvahner, John Henry, 1891, B. A., Jackson, assistant cashier, First National Bank.
Noble, W. F., 1879, B. A., Tiffin, attorney-at-law.
Nold, John H., 1900, E. M., assistant to F. A. Ray, Columbus, Ohio.
Norris, John S., 1901, B. Ph., Columbus.
Nurian, Kerson, 1899, M. E., Turtle Creek, Pa., Westinghouse E. & M. Co.
Nutt, Arthur Chase, 1897, B. Ph., Lewiston, Me., Bates College.

O

Obetz, Francis Henry, 1896, G. Ph., '99, M. D., Starling Medical College, Columbus, physician.
O'Brine, David, 1881, B. Sc., M. Sc., 1882, E. M., D. Sc., M. D., Urbana, physician.
Odebrecht, August, 1895, G. Ph., Columbus, with H. Braun & Sons.
O'Kane, Sarah Eliza, 1891, B. Ph. (Mrs. F. M. Raymond), 215 West Tenth ave., Columbus.
O'Kane, Walter Collins, 1897, B. O., Troy, journalist.
Orton, Clara Gregory, 1897, B. Ph., Columbus, 1043 Fair ave., teacher Central High School.
Orton, Edward, Jr., 1894, E. M., Columbus, professor of Ceramics, State University, State Geologist of Ohio.

Orton, Samuel Torrey, 1901, B. Sc., Columbus.
Orton, Walter Edwin, 1899, LL. B., Williamstown, Mass.
Osborn, Abner A., 1900, B. Sc., Columbus.
Osborn, Samuel Galloway, 1897, LL. B., Columbus, attorney, 275 East State street.
Osborn, Raymond Carroll, 1898, B. Sc., 1900, M. Sc.
Ozias, Albert N., 1889, M. Sc., principal High School, Minneapolis, Minn.

P

Pabodie, Robert Jewett, 1899, M. E., Watertown, N. Y., assistant general foreman Watertown Steam Engine Company.
Page, William Herbert, 1892, LL. B., 1894, LL. M. (B. A., Yale), Columbus, professor of Elementary Law, State University.
Palmer, Walter K., 1893, M. E., State University, Kansas City, Mo., consulting electrical and mechanical engineer.
Parker, John Bernard, 1898, B. A., 1900, M. A., Danville.
Parmenter, William W., 1900, B. A., Supt. public schools, Jackson Center, Ohio.
Parrett, Benjamin Creamer, 1902, B. Sc., Washington C. H.
Parsons, George McLellan, 1901, B. Ph., Columbus.
Patch, Homer Austin, 1896, C. E., Minneapolis, Minn., draftsman American Bridge Company.
Patchell, Owen P., 1889, B. Ph., Paul's Valley, Indian Ter., attorney-at-law.
Patchin, Rufus Harry, 1898, LL. B., Cleveland, 533 Society for Savings Building, attorney-at-law.
Paterson, Bertha Gildersleeve, 1901, B. A., instructor in Gallaudet College, Washington, D. C.
Pavlicek, Frank Joseph, 1901, B. Ph., Toledo.
Payne, Halbert Edwin, 1887, M. E., 256 Broadway, New York City, president American Typewriter Co.
Peal, Allen Saunders, 1895, B. A., Chicago, Ill.
Pearce, George Dower, 1892, G. Ph., South Charleston.
Pearl, Allen Sexton, 1894, M. E. in EE., Chicago, Ill., Ohio representative of Central Electric Company.
Pease, Edward Livingstone, 1895, B. A., 1899, LL. B., Columbus, Indianola avenue.
Pedlow, Edward Benjamin, 1893, C. E., New Straitsville, superintendent Columbus and Hocking Coal and Iron Co.
Peppel, Samuel Vernon, 1899, B. Sc. (Chem.), chemist Ohio Geological Survey, State University, Columbus.
*Pence, David Arrel, 1894, M. E., died December 15, 1901.
Perkins, Earl Harley, 1893, LL. B., Wellington.
Perry, Elma Brooks, 1901, B. Sc. (Dom. Sci.), B. Ph., fellow in Botany, State University, Columbus.
Perry, John Cole, 1901, B. Sc. (Agr.), Columbia Station.
Peters, William Lincoln, 1885, M. E., Riverside, Cal., merchant.
Pfarr, Philip Lewis, 1896, B. Sc. (Agr.), Columbus.
Phelps, Cyrus Alba, 1892, B. Sc., Chalchihuites Zac Mexico, Treasurer-cia Minerva "Huiriachic" S. A.
Pierce, John Mattison, 1895, M. E. in EE., South Charleston.
Pilcher, Hastings Moore, 1895, M. E. in EE., electrician Dundee, Natal, S. A.
Pitts, Grace Lenore, 1900, B. Ph., 1901, M. A., Columbus, East Gay street.
Plantz, Wyatt Garfield, 1894, B. A., Pomeroy.

* Dead

Pleukharp, Rev. Chas. V., 1885, M. E., La Crescenta, Cal.
Plimmer, Gertrude Alice, 1896, B. Ph., Columbus, 1188 Oak street.
Plum, Harley Martin, 1902, B. A., Colorado Springs, Colo.
Pocock, Lucy Hunt, 1902, B. Ph., Columbus.
Polk, Walter C., 1895, C. E., engineer Central Construction Co., Louisville, Ky.
Pomerene, Frank Etherington, 1891, B. Ph., 1895, LL. B., Coshocton, attorney-at-law.
Pool, Harwood Redington, 1881, B. Ph., LL. B., 62 Cedar street, New York City.
Porter, George Henry, 1901, B. Ph., New Philadelphia.
Porter, Mary Baxter, 1897, B. Ph. (Mrs. Misseldine).
Postle, Herman R, 1894, C. E., Columbus, East Seventh avenue, teacher in North High school.
Postle, Kenneth F., 1894, B. A., Lancaster, Ky., teacher.
Poto, Frank Bert, 1901, B. Sc., (Chem.), assistant chemist National Steel Co., Columbus.
Powell, Chas. S., 1893, M. E. in EE., Cleveland, representing Westinghouse E. & M. Co., 1007 New England Building.
Powell, Cornelia Thompson, 1902, B. A., Columbns.
Powell, Edward Thompson, 1896, LL. B., Columbus, attorney, 518 East Broad street.
Powell, Norman Clemson, 1895, D. V. M., Damascus.
Prall, Anna Dickson, 1898, B. A., Columbus, pension office.
Pratt, Fred K., 1900, C. E., topographer Wheeling & Lake Erie R. R., St. Clairsville, Ohio.
Price, Homer Charles, 1897, B. Sc. (Agr.), (M. Sc., Cornell, 1899), professor of Horticulture, Iowa State College, Ames, Iowa.
Priest, Frederick, 1895, D. V. M., Newark, veterinary surgeon.
Prince, Frank Joseph, 1902, B. Sc., teacher in Bellefontaine High School.
Pruner, William Reist, 1902, LL. B., Springfield, Ohio.
Pryor, Charles Foster, 1898, LL. B., Columbus.
Pugh, Lawrence Randolph Whetzel, 1893, B. Ph., 1895, LL. B., Columbus, attorney-at-law, 13 Board of Trade.
Pulling, Margaret G., 1900, B. Ph., 1901, M. A., Columbus.
Pumphrey, John Homer, 1898, B. Sc., Clayton.
Putnam, Abbey Slocum, 1897, B. Ph.

R

Radcliff, Charles Anson, 1895, B. Ph., attorney, Jackson.
Randall, Emilius Oviatt, 1892, LL. M. (B. Ph., Cornell University), Columbus, attorney-at-law, professor in Law School, State University.
Randolph, Edward S., 1897, LL. B. (A. B., Ohio Wesleyan University), Somerset.
Rane, Frank William, 1891, B. Agr. (1892, M. Sc., Cornell), Durham, N. H., professor of Horticulture, New Hampshire College.
Rarick, Murray M, 1896, B. Sc. (Agr.), Jacksontown, physician.
Rasor, Samuel Eugene, 1898, B. Sc., M. A., 1902, instructor in Mathematics, State University, Columbus.
Rawson, Levi, 1899, C. E., Sistersville, W. Va., Carter Oil Co.
Ray, Frank A., 1887, E. M., professor of Mine Engineering, State University, 137 King avenue, Columbus, Ohio.
Ray, William M., 1893, C. E., room 825, Hickox Building, Cleveland, assistant engineer B. & O. R. R.
Raymond, Coles Abel, 1894, C. E., Toledo, O., draughtsman American Bridge Co.
Raymund, Frank M., 1888, B. A., Columbus, attorney-at-law, 215 West Tenth Ave.
Raymond, Maud, 1899, B. Ph., 1901, M. A. (Mrs. Wm. Tipper), Waynesburg, Pa.

Redick, Mary Glisson, 1898, B. Ph., Findlay.
Redrow, Walter L., 1900, B. Sc., Columbus.
Reed, Robert Browning, 1896, M. E. in EE., Zanesville, Zanesville Electric Co.
Reed, William Allen, 1897, E. M., Querida, Colo., mining engineer Bassick G. M. Co.
Rees, Edith Coleste, 1901, B. A., Columbus.
Reese, David R., 1901, B. A., Shawnee.
Reese, William Daniel, 1891, B. A.
Reese, William Henry, 1896, G. Ph., Glen Roy, Pharmacist.
Reeves, Archibald C., 1887, C. E., 153 Superior avenue, Dayton, assistant city engineer.
Resler, Edwin D. (B. A., Otterbein), 1897, M. A., Westerville...
Rice, Herbert A., 1897, C. E., Civil Engineer Ironton Portland Cement Co., Ironton.
Rice, Mabel Elise, 1898, B. A. (Mrs. William Minshall), Cleveland, Ohio.
Rice, Mary Washington, 1900, B. A., Columbus.
Rice, Susan Esther, 1899, B. A., Columbus, 111 West Fifth avenue.
Richardson, Hamilton Hutchinson, 1892, B. Agr., Brooklyn, gardener.
Richardson, William Waddle, 1899, B. Ph., Washington, D. C.
Richey, Luzerne A., 1897, B. Ph.
Rickey, Alla B. 1889, B. Ph. (Mrs. George H. Cless), Eighteenth street, Colnmbus.
Rickey, Tallmadge A., 1900, B. Ph., Columbus.
Riddle, Howard Sterling, 1897, M. E. in EE., Akron, mechanical engineer Diamond Rubber Co.
Riddle, Lumina C., 1897, B. Sc., 1898, M. Sc., Grand Haven, Mich., teacher in Science and Mathematics in the Akeley Institute.
Ridenour, Walter Ashton, 1902, B. Ph., Jackson, Ohio.
Rietz, Henry Lewis, 1899, B. Ph., Gilmore.
Riggs, Ernest Jacob, 1895, B. Sc. (Agr.), M. Sc. (H. & F.), Raccoon Island, Ohio.
Rightmire, George Washington, 1895, B. Ph., 1898, M. A., Columbus, teacher in High School.
Rightmire, Robert Elwood, 1902, M. E., Union Pacific Ry., Omaha, Neb.
Ritchey, Joseph C., 1890, B. Sc., Mingo Junction, with Junction Iron and Steel Co.
Roach, Simeon Andrew, 1899, B. Ph., Chillicothe.
Robbins, George A., 1899, B. Ph., Columbus, Lexington avenue.
Roberts, Cyrus Swan, 1898, E. M., civil engineer and Asst. Supt. Montezuma Lead Co.,Santa Barbara, Chihuahua, Mexico.
Robinson, Eckka Mazola, 1892 B. Sc. (Mrs. George Rowe).
Robinson, Erdis Geroska, 1893, C. E., resident engineer engineering department of Mexican Central Railway, Guadalajara, Mexico.
Robinson, Zella Vinna, 1898, B. Ph., 1900, M. A. (Mrs. Otto Fitzalan Hakes), Dunkirk, N. Y.
Rockwell, Mary Fannie, 1899, B. Ph., Columbus.
Roebuck, Carl Fletcher, 1900, B. Ph., 1902, LL. B., Colnmbus.
Rogers, Andrew, 1896, B. Ph., physician and surgeon, West Jefferson, Ohio.
Rogers, Frank Persons, 1899, B. A., Columbus, 140 Warren street.
Rogers, James Bertrad, 1896, E. M., chemist Salem Iron Co., Leetonia, Ohio.
Roney, Mary Malvina, 1901, B. Ph., Columbus.
Root, Willis J., 1885, E. M., Columbus, general superintendent National Steel Co.
Rowlee, Henry A., 1897, M. E., Columbus, inspector Ordnance Department U. S. A.
Ruhlen, Carl Marble, 1898, M. E., Tacoma, Wash., assistant quartermaster's agent U. S. army.
Ruhlen, Frank, 1896, B. Sc. (Agr.), Columbus, Instructor in Zootechny, State University.
Ruhlen, La Mott, 1902, B. Sc., Plain City, Ohio.

Rule, Ralph R., 1897, LL. B. (B. S., Tri-State College, Ind.), Greenspring.
Ruppersburg, Emma Anna, 1891, B. Sc., 1896, M. Sc., Columbus, teacher in High School, 842 South High street.
Russell, Ralston, 1896, B. Ph., Pomeroy.
Ryland, Paul Dillon, 1901, C. E., Columbus, assistant on engineer's corps maintenance of way Dept., C. H. & H. R. R.

S

Sabine, Annie Ware, 1884, B. A., 1886, A. M. (1888, B. Sc., Mass. Institute Technology) (Mrs. W. H. Siebert), Columbus.
Sabine, Wallace Clement, 1886, B. A. (M. A., Harvard), 53 Trowbridge street, Cambridge, Mass., assistant professor of Physics, Harvard University.
Sackett, Carl Leroy, 1901, LL. B., Big Horn City, Wyo.
Safford, Robert Edwin, 1894, B. Sc., New York City, Mexican Metallurgico Co.
Salem, Edna Esther, 1902, B. Ph., Columbus.
Sandoe, Lydora Olivia, 1893, LL. B. (Mrs. Bachman), 1425 Bryden Road, Columbus.
Sater, Clinton Huron, 1902, D. V. M., Sater.
Sater, Lowry Francis, 1895, B. Ph., 1897, LL. B., Columbus, attorney, 114 Buttles avenue.
Sayre, Charles B., 1900, B. A., secretary Athletic Club, Cincinnati, Ohio.
Scarlett, Henry Lancelot, 1901, B. A., Columbus.
Schaff, Mae B., 1900, B. Ph., 1902, M. A., Columbus.
Schaeffer, Freelan Wilbert, 1900, B. Sc., Columbus.
Schantz, Albert John, 1902, B. Sc., Dayton, Ohio.
Schaub, Edward Louis Tascher, 1885, M. E., Columbus, assistant superintendent Asociated Charities.
Schaup, Charles E., 1897, E. M., chief engineer Southern Coal and Transportation Co., Berrysburg, W. Va.
Scheibell, William O., 1888, E. M., Columbus, secertary and general manager The American Art Tile Co., 1040 Fair avenue.
Schlesinger, Hugo Nathan, 1899, LL B., Xenia.
Schoedinger, Ferdinand Philip, 1902, B. A., Columbus.
Schoedinger, Frederick H., 1902, LL. B., Columbus.
Schreiber George E., 1900, M. E. in EE., St. Louis, Mo., electrical engineer with H. H. Humphrey.
Schreiber, John Martin, 1899, M. E. in EE., Cleveland, Cleveland Electric Street Railway.
Schroll, Otto, 1886, C. E., Wheeling, W. Va., superintendent Wheeling Terminal R. R. Co.
Schueller, Erwin Waldemar, 1892, B. A., 1894, M. D., Columbus, physician, 465 South High street.
Schwab, Frank Wilbert, 1902, B. Sc., New Philadelphia.
Schwier, Minona, 1897, B. A., Columbus, 212 East Mound street.
Scott, Anna Neil, 1886, B. A., 1274 Summit street, Columbus.
Scott, Bertha, 1890, B. Ph., Indianola Place, Columbus.
Scott, Herbert, 1893, B. Sc., pastor M. E. church, Marietta, Ohio.
Scott, Charles Felton, 1885, B. A., Pittsburg, Pa., chief electrician Westinghouse E. & M. C., 6214 Sellers street.
Scott, Daisy Medill, 1887, B. A., Columbus, teacher in High School.
Scott, Dudley, 1900, B. Ph., Columbus.
Scott, Emma, 1888, B. Sc., Brindiban, India missionary.
Scott, Ernest, 1897, B. Sc. (Agr.), Berlin, Germany.

Scott, Mary Odella, 1885, B. A., Columbus, teacher in High School, 87 West Fourth avenue.
Scott, Mary Mermon, 1887, B. A., 1274 Summit street, Columbus.
Scott, Mary Bole, 1896, B. A., Columbus, 926 Oak street, Columbus School for Girls.
Sears, Walter James, 1894, B. Ph., Chillicothe, with Sears and Nichols Co.
Sedgwick, Edward Crayton, 1895, M. E. in EE., Columbus, Case Mfg Co., chief engineer.
Selby, Augustine D., 1893, B. Sc., Wooster, botanist and chemist, Ohio Experiment Station.
Sellenings, Albert Eugene, 1896, B. Ph., M. D., 102 E. 31st street, New York, physician.
Seney, Allen J. (B. Ph., University of Michigan), 1899, LL. B., North Baltimore.
Seney, George E., Jr., 1901, LL. B., Toledo, Ohio.
Senter, Herbert Pike, 1902, C. E., Bay City, Mich.
Serva, Adam A., 1893, M. E. in EE., Ft. Wayne, Ind., assistant sales manager Fort Wayne Electric Works.
Seymour, Raymond J., 1900, B. Sc., Fellow in Natural History, Tuft's College.
Shank, Robert J., 1897, LL. B., Hamilton.
Sharp, Charles C., 1888, C. E., president Raven Coal and Coke Co., superintendent Boomer Coal and Coke Co., Boomer, W. Va.
Sharp, David Barton, 1893, LL. B., Columbus, 335 West Fourth avenue.
Shaw, Edward Lee, 1902, B. Sc., Newark.
Shaw, Harry R., 1901, B. Ph., Zanesville.
Shellaberger, Marley Rolin, 1897, B. Sc. (Agr.), Garland, Ohio.
*Shepard, Frank Reed, 1893, B. A., died August, 1893.
Shepherd, Charles W., 1900, C. E., draftsman Illinois Steel Co., Chicago, Ill.
Sherman, Christopher Elias, 1894, C. E., Columbus, professor in Civil Engineering, State University.
Sherman, John King, 1901, C. E., assistant on Engineering Corps P., C., C. & St. L. Ry., Pittsburg, Pa.
Shield, Wallace B., 1898, B. A., Kansas City, Mo., Manual Training High School.
Short, Sidney H., 1880, B. Sc., 44 Broad street, New York City.
Shuck, Carey Lucas, 1898, B. Ph., "Pittsburg Post," Pittsburg, Pa.
Shurtz, Olive L., 1898, B. Ph., Columbus, 26 King avenue.
Siebert, Wilbur H., 1888, B. A. (M. A., Harvard), Columbus, professor History, State University.
Sigerfoos, Charles Peter, 1889, B. Sc., 1897, Ph. D. (Johns Hopkins University), Minneapolis, Minn., professor of Zoology, University of Minnesota.
Sigerfoos, Edward, 1891, B. Ph., Vigan, Illocees Sur, P. I., Capt. 51st U. S. Infantry.
Simonton, Mark, 1895, M. E. in EE., Columbus, treasurer and general manager Electric Supply and Construction Co.
Simpson, Abigail Ellen, 1895, B. A., Canton, Ohio.
Singleton, Charles Tod, 1900, B. Ph., student State University Law College.
Sinks, Frederick Nicholas, Ph. L. (Yale University), 1898, LL. B., Columbus, Miller avenue.
Skiles, Roscoe Carleton, 1901, LL. B., Shelby, 1266 E Main street.
Skinner, Chas. E., 1890, M. E., box 435, Pittsburg, Pa., Westinghouse E. & M. Co.
Slater, Burr Homer, 1895, G. Ph., Chesterville, pharmacist.
Slyh, Emma Almeida, 1892, B. Sc., Marble Cliff.
Smith, Albertine, 1900, B. Ph., Columbus.
Smith, Alice May, 1897, B. Ph.

* Dead.

Smith, Burton Griffin, 1895, G. Ph., chemist for Columbus Pharmacal Co., Columbus, Ohio.
Smith, Carl Clyde, 1890, B. Ph., Brush, Col.
Smith, Clarence Elmer, 1898, G. Ph., Columbus, student O. M. U.
Smith, David William, 1899, C. E., Columbus, engineer Hocking Valley Ry. Co.
Smith, Edward E., 1897, G. Ph., Indian Territory.
Smith, Edward Trevette, 1898, LL. B., Columbus, Ohio, King Building.
Smith, Florizel, 1880, B. A., Spahr Building, Columbus, attorney-at-law. 970 Bryden Road.
Smith, Harry Ford, 1902, M. E., Lexington, Ohio.
Smith, Horace Prescott, 1886, B. Sc.
Smith, Maud Virginia, 1894, B. A. (Mrs. Thomas Chalmers), Port Huron, Mich.
Smith, Myron Alphonso, 1892, B. Ph., Columbus, 52½ N High street.
Smith, Nathaniel B., 1893, D. V. M.
Smith, Philo Christopher, 1885, B. Sc., Middlebranch, farmer.
Smith, Virginia, Roletta, 1900, B. Ph., Columbus, 477 W. Seventh avenue.
Snider, Charles M., 1897, B. Sc. (Ind. Arts), Columbus, 162 West Mound street, draftsman Jeffrey Mfg. Co.
Snider, Jesse Worthington, 1893, LL. B., LL. M., Columbus, 340 Denmead avenue.
Snively, Harry H., 1895, B. A., Columbus, teacher in High School, 1332 Highland street.
Snow, Mason J., 1902, LL. B., Columbus.
Snow, Walter A., 1897, B. Ph., Park Place, Minneapolis, Minn., Pastor Congregational Church.
Snyder, Addison Hogan, 1901, B. Sc. (Agr.), Washington, D. C., Bureau Plant Industry.
*Snyder, Henry, 1879, B. Sc., 1892, M. Sc. Died September, 1898.
Snyder, James Edward, 1892, LL. B. (B. A., Wooster University).
Snyder, Walter S., 1897, LL. B., Columbus, attorney, 69 North Fourth street.
Somermeier, Edward Everett, 1898, G. Ph., Columbus, instructor in Mining and Metallurgy, State University.
Southard, Eustace Elden, 1895, G. Ph., Columbus, pharmacist, 470 Oak street.
Southard, Thomas Campbell, 1896, B. A., Columbus, 470 Oak street.
Sparks, Edwin Earle, 1884, B. A., 1892, M. A., 1900, Ph. D., Chicago University, associate professor, Chicago, Ill.
Sparks, Homer Haven, 1902, LL. B., Columbus.
Spencer, William Henry, 1891, G. Ph., Sandusky, with Strong and Spencer.
Spencer, Ralph Oliver, 1899, B. A., Columbus.
Sperr, Frederick W., 1883, E. M., Houghton, Mich., professor of Civil and Mining Engineering, Michigan School of Mines.
Sperry, Wilmot, Jr., 1901, B. Ph., Mt. Vernon.
Sprague, Charles Franklin, 1896, B. A., 1899, LL. B., Wapakoneta.
Sprague, Clarence Milton, 1899, C. E., Columbus, Room 2, Union Station, Assistant on Engineers' Corps, P., C., C. & St. L., Pittsburg Division.
Sprague, William Ralph, 1899, B. Ph., Columbus, 71 West Tenth Avenue.
Sproat, Amasa Delano, 1902, E. M., Mexico.
Spurrier, John Randolph, 1896, M. E. in EE., Manchester, Eng., Foreman Detail Division of Mechanical Department of British Westinghouse E. & M. Co.
Stahl, Charles Henry, 1902, LL. B., Cleveland.
Staley, Marcellus, 1899, M. E. in EE., electric elevator repairs, 270 West street, New York.

* Dead.

Stanberry, Charles L., 1892, G. Ph., pharmacist, McConnellsville.
Starbuck, Daniel Carl, 1899, M. E. in EE., chief electrician flag ship "Chicago," U. S. N.
Steeb, Carl Eckert, 1899, B. Ph., Columbus, accountant, O. S. U.
Stephenson, Bertram Shearer, 1901, B. Ph., Jackson.
Stephenson, Henry Thew, 1894, B. Sc., Bloomington, Ind., instructor in English, University of Indiana.
Stevens, Frank M., 1897, LL. B., Elyria, attorney-at-law.
Stevenson, Amos Claude (A. B., Oberlin College)) 1900, LL. B., Fostoria.
Steward, Charles Benjamin, 1900, B. Sc. (Agr.), Canal Winchester.
Stewart, Edwin Earle, 1895, LL. B. (M. A., Antioch College), attorney, Springfield.
Stewart, Lee Raymond, 1896, C. E., engineer in charge of Mould Loft, N. Y. Ship Building Co., Camden, N. J.
Stewart, Harford Toland, 1896, M. E. in EE., agent General Electric Co., Columbus.
Stiger, Thomas A., 1899, LL. B., Bucyrus.
Stimson, Charles Leslie, 1899, B. A., Columbus, 737 Bryden Road.
Stimson, George, 1900, B. A., Columbus, 737 Bryden Road, student Medical Department, University of Pennsylvania.
Stinebaugh, Isaac Long, 1892, C. E., surveyor and civil engineer, Rockaway, O.
Stocker, James Arthur, 1902, C. E., Columbus.
Stone, Carlton Elijah, 1899, C. E., civil engineer Pittsburg & Lake Erie Railroad Co., Coraopolis, Pa.
Stone, Thomas Wade, M. E., 1902, Ft. Wayne, Ind.
Storer, Norman Wilson, 1891, M. E. in EE., Pittsburg, Pa., Westinghouse E. & M. Co.
Storer, Simon B., 1893, M.E. in EE., Syracuse, N. Y., engineering and salesman, Westinghouse E. & M. Co.
Stouffer, Charles Irwin, 1893, LL. B., Columbus, 387 Oak street.
Stoughton, George L., 1895, LL. B. (B. A., Otterbein University).
Stull, Emmett Willet, 1894, M. E. in EE., Johnstown, Pa., engineer motor department The Lorain Steel Co.
Stull, Ray Thomas, 1902, E. M., American Terra Cotta and Carmine Co., Chicago, Ill.
Stump, Franklin Pierce, 1892, B. Agr., Convoy, farmer.
*Stump, John William, 1895, C. E., Died May 31, 1900.
Stump, William Lisle, 1897, G. Ph., 1898, M. Ph., Dayton, pharmacist.
Surface, Harvey Adam, 1891, B. Sc., 1892, M. Sc., professor Biology Pennsylvania State College, State College, Pa.
Sutherland, Margaret, 1898, B. Ph., (Mrs. Benj. Flynn), Columbus, Neil ave.
Sutphen, James Leonard, 1897, G. Ph., Columbus, 673 Livingston avenue.
Swaney, Sara Campbell, 1902, B. Ph., East Liverpool, Ohio.
*Swartzel, Earl Glenn, 1895, B. Sc. Died March, 1899.
Swartzel, Karl Dale, 1893, B. Sc., 1894, M. Sc., Columbus, assistant professor of Mathematics, State University.
Swisher, William Henry, 1896, G. Ph., M. D., Eaton, physician.
Sykes, William Edgar, 1898, LL. B., Marietta.
Sylvester, John E., Jr., 1898, B. Ph., Wellston, editor "Wellston Telegram."

* Dead.

T

Talbot, Ellen B., 1890, B. A., Troy, N. Y.
Talbot, Herbert Swan, 1898, B. Ph., Columbus, clerk Columbus Board of Trade, 640 Franklin avenue.
Talbot, Mignon, 1892, B. A., 167 West Tenth avenue, Columbus, teacher in High School.
Tangemann, Henry Theodore, 1902, LL. B., Kettlerville, Ohio.
Tanner, Elwood Wood, 1902, M. E., Zanesville, Ohio.
Travis, Fred Lant, 1900, B. A., Pana, Ill., teacher.
Travis, John F., 1900, B. A., 1902, M. A., Columbus, Fellow in Mathematics, Ohio State University.
Taylor, Arthur W., 1894, E. M., Cleveland, chemist for Otis Steel Co., Ltd.
*Taylor, Francis Asbury, 1885, B. A. Died July 25, 1891.
Taylor, Alexander R., 1895, B. Sc.
Taylor, Bessie Batelle, 1902, B. Ph., Columbus.
Taylor, Fredric Wellington, 1900, B. Sc. (Agr.), Washington, D. C., field assistant U. S. Soil Survey.
Taylor, Ralph Buren, 1895, B. A.
Taylor, Joseph Russell, 1887, B. A., M. A. (Columbia University), Columbus, associate professor English Literature, State University.
Taylor, Pearl V., 1897, B. A., Columbus, 46 West Noble.
Taylor, William Harry, 1902, B. Ph., Columbus.
Teter, Anstie Welsh, 1896, G. Ph., Bainbridge, pharmacist.
Teter, J. Sumner, 1901, B. Sc., Columbus.
Thomas, James O., 1897, C. E., Columbus, 404 West Goodale, wire chief Central Union Telephone Co.
Thomas, Lawrence David, 1900, B. Ph., Lancaster.
Thompson, Carmi A., B. Ph., 1895, LL. B., Ironton, city solicitor, 151 Center street.
Thompson, Howard N., 1888, B. Ph., Washington, D. C., correspondent Associated Press.
Tomlinson, James Rowe, 1892, C. E., civil engineer, Chillicothe.
Towne, Robert S., 1879, B. Sc., 1880, E. M., New York, N. Y., president Compania Metallurgica Mexicana.
Townshend, Alice Margaret, 1880, B. A. (Mrs. Charles Wing), Columbus.
Townshend, Arthur Bailey, 1878, B. Sc., M. D., 33 West 33d street, New York, N. Y., physician.
Tufts, Charles Hill, 1899, E. M., assistant chemist Edith Furnace, American Steel and Wire Co., Allegheny, Pa.
Tupper, Eugene L., 1893, G. Ph., Ottawa, physician.
Turner, Arthur M., 1893, M. E. in EE., 281 Oak street, Chicago, Ill.
Turner, Edward C., 1901, LL. B., Columbus.
Turner, Frederick Lewis, 1897, B. A., 1898, M. A., Oak Park Hills, teacher in High School.
Twiss, George R., 1885, B. Sc., Cleveland, teacher of Physics in High School.
Twiss, Edith Minot, 1895, B. A., Cleveland, teacher in West High School.
Twiss, Marion Evans, 1897, B. A., librarian University of North Dakota.
Tyler, Frederic Jared, 1900, B. Sc. (H. & F.), 1902, M. A., assistant in Botany, State University, Columbus.

* Dead.

U

Uncles, Margaret Anna, 1897, B. A., Columbus, Gill street.
Underwood, Ella, 1898, B. A. (Mrs. O. A. Davis), Alliance.
Urban, Harry Marshall, 1898, C. E., Pittsburg, Pa., "Pan Handle" R. R., assistant supervisor.

V

Vail, Charles A., Ph.B. (Scio College), LL. B., 1902, Scio, Ohio.
Vance, Mary Grace, 1898, B. A., Chicago, Ohio, principal High School.
Vandervoort, William P., 1886, E. M.
*Van Harlingen, Edward M., B. Sc., 1883, M. Sc., 1897. Died 1900.
Veneman, Nevin Edward, 1902, LL. B., Dayton, Ohio.
Viets, Willis B., 1886, E. M., Parryville, Pa., chemist, Carbon Coal and Iron Co.
Vinson, Albert Earl, 1901, B. Sc., instructor in Agricultural Chemistry, State University.
Voke, Lewis F., 1893, G. Ph., Columbus, M. D., Starling Medical College, physician, France Medical Institute.
Voorhees, Burt Fisk, 1894, LL. B., Coshocton.
*Voorhees, Charles W., 1892, LL. M. (B. Sc., Scio College). Died 1898.
Voorhees, Isaac M., 1894, B. Ph., Cadiz, journalist, editor of "Harrison News."
Vornholt, Julius Franklin, 1898, B. A., New Bremen.
Vosskuehler, Joseph H., 1900, M. E., instructor in Drawing, State University.

W

Wadsworth, F. L. Olcutt, 1888, B. Sc., 1889, E. M., M. E., director of Allegheny Observatory, Allegheny, Pa.
Wagstaff, Edward A., 1893, G. Ph., Niles, pharmacist, Jones & Wagstaff.
Waid, Clarence William, 1898, B. Sc. (H. & F.), assistant Horticulturist O. A. E. S., Wooster, Ohio.
Walker, Frederick William, 1896, B. A., Columbus, 46 North Lazelle street.
Walker, James Madison, 1896, C. E., Harrisville, Ohio, resident engineer W. & L. E. R. R.
Walsh, Annetta Curtis, 1897, B. A., Columbus, 148 Buttles avenue.
Walsh, Mary Helen, 1896, B. Ph., Columbus, 148 Buttles avenue.
Ward, J. C., 1889, B. A., Painesville, engineer and surveyor.
Ward, Lila Lucile, 1901, B. Ph., Perrysburg.
Ward, Philip Emerson, 1899, B. Ph., Willoughby.
Warden, Leonard C., 1899, B. Sc. (H. & F.), Beach Park, Ohio.
Warner, Cora, 1882, B. Ph., corner Hubbard and Dennison avenues, Columbus.
Warren, Arthur Robert, 1893, LL. B., Columbus.
Warren, Grant Alexander, 1894, LL. B.
Watson, Benson Gruber, 1896, B. Ph., Columbus, attorney, The Garland.
Watson, Edward T., 1897, B. Sc.
Watt, Stern P., 1886, M. E., vice president and mechanical expert Hine-Watt Mfg. Co., Morgan Park, Ill.
Weaver, Mary Luretta, 1891, B. Ph., 231 Church street, Urbana.
Weaver, Harry Bright, 1894, LL. B. (B. A., Ohio Wesleyan University), Circleville, attorney.
Webb, Edward Nathan, 1902, B. Sc., Rome, Ohio.

* Dead.

Webb, Scott Anderson, 1888, B. Ph., Columbus, attorney-at-law, 222 King avenue.
Webber, Karl T., 1897, LL. B., Columbus, attorney, 2585 West Broad.
Weber, Frederick Clarence, 1901, B. Sc. (Chem.), assistant in Chemistry, Kansas State Agricultural College, Manhattan, Kansas.
Weick, Carrie Rosina, 1901, B. Sc., Newark, N. J.
Weick, Charles William, 1898, B. Sc. (Ind. Arts), New York, instructor Manual Training, Teachers College.
Weidner, George F., 1887, G. Ph., Columbus, Kauffman-Lattimer Co.
Weinland, Edgar Lynn, 1893, LL. B. (B. Ph., Otterbein University), Columbus, attorney, 1256 Neil avenue.
Weisman, Laura A., B. Sc. (Dom. Sci.), (Mrs. C. W. Burkett), Durham, N. H.
Welch, Clark J., 1888, C. E., bridge and structural engineer, 11 Broadway, New York.
Welch, Oliver Bartlet, 1895, M. E. in EE., Dennison, general manager United Electric Co.
Weld, Harry P., 1900, B. Ph., Marysville.
Wellbaum, Arvy Elroy, 1902, M. E., Smith-Vaile Co., Dayton, Ohio.
Welling, Faith Cornelia, 1901, B. A., Worthington.
Wendt, William Carl, 1889, G. Ph., 901 South High street, Columbus, W. C. Wendt & Co.
Wertz, Edwin Slusser, 1899, B. Ph., 1900, LL. B., Columbus.
West, Earle Downs, 1900, B. A., Columbus.
West, Frederick Rollin, 1901, LL. B., Columbus.
Wharton, Homer Franklin (B. Sc., Muskingum College), 1901, LL. B., Washington.
Whitacre, Horace J., 1891, B. Sc., 1895, M. D., Columbia University, Cincinnati (Mt. Auburn), physician.
Whitacre, Marion, 1894, B. Sc., 1899, M. D., Columbia University, Cincinnati, physician.
Whitaker, William Earl, 1901, B. Ph., Colton.
White, David S., 1890, D. V. M., Columbus, dean College of Veterinary Medicine, State University.
Whiteside, John Wesley, 1901, B. Ph., Bloomingburg, Ohio.
Wiggins, Sherman Tecumseh, 1894, LL. M. (LL. B., University of Michigan), 1897, B. Ph., Coffeyville, Kan.
Wikoff, John Burkett, 1884, B. Ph., Cambridge, assistant to general manager Cleveland & Marietta Railway Co.
Wilcox, Alvah Newton, 1895, M. E., Dayton, Pinneo & Daniels Co.
Wilcox, Edwin Mead, 1896, B. Sc. (Harvard University, 1899, Ph. D., Harvard University), Oklahoma College, Stillwater, Oklahoma.
Wilcox, McAllister, 1898, LL. B., Sunbury.
Wildermuth, Andrew Lee Roy, 1899, LL. B., Columbus.
Wilgus, Horace Lafayette, 1882, B. Sc., 1884, M. Sc., Ann Arbor, Mich., professor of Law, University of Michigan.
Wilgus, James A., 1888, B. Ph., M. A., Plattville, Wis., professor of History and Economics in the State Normal School.
Williams, Anna Ernestine, 1899, B. Ph., Fellow in Rhetoric, State University.
Williams, Clara M., 1900, B. Ph., Columbus.
Williams, Harry Ernest, 1902, M. E., Union Pacific Ry., Omaha, Neb.
Williams, Herbert Oswald, 1894, B. A., 1900, M. A., Columbus, teacher in High School, 190 East Long street.
Williams, Guy Rulon, 1895, LL. B., Columbus, attorney-at-law.
Williams, Lloyd Thomas, 1896, B. Ph., 1900, LL. B., Toledo, attorney, 55 Produce Exchange, 326 Second street.

Williamson, Allen Sherman, A. B. (Marietta College), 1901, LL. B., Marietta.
Williamson, Edward Bruce, 1898, B. Sc., Bluffton, Ind.
Williamson, Homer Davison, 1901, B. Sc. (Chem.), chemist Ohio State Board of Health and Starling Medical College.
Wilson, Harry Rush, 1895, LL. B. (B. A., Mt. Union College), 1896, LL. M., Columbus, attorney, 1459 Bryden Road.
Wilson, Frank, (B. S., Scio College), 1900, LL. B., Jolly.
Winter, Nevin Otto, 1897, LL. B. (B. A., Ohio Wesleyan University), Spitzer Building, Toledo.
Wirth, Ida M., 1895, B. Ph., Columbus, South High street.
Wirthwein, Louis Philip, 1899, C. E., Columbus, 677 South High street, city engineer's office.
Wise, Albert Joseph, 1898, C. E., Cleveland, Ohio, supervisor of track, 5th District, Cleveland & Indianapolis Div. C., C., C. & St. L. R. R.
Wise, Charles Clifton, LL. B., Millersburg, Ohio.
Wolcott, Roy C., 1895, B. Ph., 1896, M. D.
Wolf, Herman Howard, 1895, C. E., Lieut. U. S. Revenue Cutter Service, U. S. S. "Dexter."
Wood, Francis Carter, 1891, B. Sc., 205 W. 57th street, New York City, Pathologist to St. Luke Hospital.
Wood, Kenneth Dodge, 1881, B. A., Columbus, secretary of the Central Ohio Paper Company.
Wood, Willard B., 1893, B. Sc., Columbus, In Columbus Postoffice.
Woods, Charles H., 1900, LL. B., Chillicothe.
Woods, William Burroughs, 1902, B. Ph., Garretsville.
Woodworth, Henry Julian, 1887, B. Sc., Logan.
Worcester, Wood Frank, 1899, B. Ph., 1901, LL. B., Columbus, O. S. U. Dormitory.
Workman, Charles, 1896, B. A., Columbus, 227 N. Seventeenth street.
Wright, Burr Roscoe, 1897, B. Ph., Columbus.
Wright, Carrie, 1892, B. Ph., Chicago, Ill., teacher in the Armour Institute.
Wright, Nelle, 1901, B. Ph., Worthington.
Wright, William Van Horn, 1893, LL. B., 1896, LL. M., Columbus Postoffice.
Wynne, Francis Edmund, 1902, M. E., Westinghouse E. & M. Co., Pittsburg, Pa.

Y

Yockey, Paul B., 1897, B. A., 1900, LL. B., Columbus, 404 West Seventh ave.
Yohe, Cyrus Elmer, 1893, LL. B., Nevada.
Yost, Lloyd, 1902, M. E., Fellow in Mechanical Engineering, Ohio State University.
Young, Cyrus Homer, 1901, B.Sc. (Pharmacy), North Lawrence.
Young, Harry Nelson, 1895, G. Ph., Flint, Michigan, pharmacist.
Young, John Wesley, 1899, B. Ph., Ithaca, N. Y., Fellow in Mathematics, Cornell University.
Young, Mary Grace, 1900, B. Ph., Mt. Vernon.
Young, Samuel N., 1900, attorney-at-law, Toledo, Ohio, 7 Spitzer Building.

Z

Zaumseil, Oscar C., 1887, Webb City, Mo., merchant.
Zurfluh, William Nicholas, 1894, M. E. in EE., Springfield, superintendent Home Lighting Power and Heating Co., room 11, Arcade Building.

INDEX.